

The Classical Review

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A MEDICAL PAPYRUS IN THE BRITISH MUSEUM.

THE British Museum has recently acquired a papyrus MS. of considerable size, containing a medical treatise, hitherto apparently unknown. The papyrus is in bad condition, and the text can only be properly edited by a scholar acquainted with Greek medical science: since in a very large number of passages the remains of writing, though illegible in themselves, are sufficient to assist and verify conjectures, which can only properly be made from a clear perception of the necessary sense. The whole MS., so far as it is *prima facie* legible, has been transcribed, but much more could be restored by further study; and as it may not be possible to publish the complete text for some considerable time, it may be worth while to give some preliminary account of it, which may possibly lead to a fuller identification of the work. It is even possible that it may turn out to be a work already extant; for the literature of Greek medicine is very inadequately edited and indexed, and, as Dr. G. Costomiris has recently shown,¹ a large number of medical works are still lying unedited in the various libraries of Europe.

The beginning of the papyrus is lost, and there are two or three lacunae in the middle, of uncertain size; but in its present condition it measures about twelve feet in length. It contains thirty-nine columns, or portions of columns, each about three inches in width, and consisting of from fifty to sixty lines. The later columns are more closely written, the writing being much compressed. The conclusion of the work is preserved, and is followed by a blank space several inches in

width. The writing is small, of a type which somewhat recalls that in which the greater part of Aristotle's *Ἀθηναίων πολιτεία* is written, but rather larger and more angular in appearance. It also contains a considerable number of abbreviations, some peculiar to itself, others identical with those found in the Aristotle. It is all in one hand, with occasional notes, additions, or corrections in the same; and on two occasions additional passages have been written on the *verso* of the papyrus. The *verso* also contains, in a quite different hand, a copy (not contemporary) of a rescript by the triumvir Marcus Antonius, addressed *τῷ κοινῷ τῶν ἀπὸ τῆς Ἀσίας Ἑλλήνων*. It is hoped to publish the full text of this shortly in the *Classical Review*.

The MS. has suffered badly, being both torn and rubbed throughout; indeed only about three columns are in a fully legible condition. Fractures are constant, and many of the sections had been disarranged; hence the restoration of the order of the fragments involved considerable trouble, and is not even yet absolutely complete. However, nearly the whole of it is now in proper order, and it is possible to determine the general character and drift of the work. Eight columns (some mutilated) are in continuous order at the beginning; two fragments containing respectively three and four columns, probably continuous, follow, perhaps immediately; two others, containing respectively three columns and half a column, are of uncertain position, but belong to this portion of the work; and then follow twenty columns, now continuous, but combined out of several fragments.

The portion lost at the beginning is pro-

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¹ *Revue des Études Grecques*, II. 343, III. 145, IV. 97.

bably not large, since the MS. opens with an introductory section, occupying $3\frac{1}{2}$ columns in its present state. Then follows the title of the work, which is in a most tantalising condition; for though the actual title is fairly legible, the preceding word or words, which apparently contained the author's name, have at present resisted decipherment. The whole appears to run thus:—

—λΟΝ . . ωC
ΝΟCOI

but it is impossible to be certain how much is missing from the first line, some very slight traces, which may be ink, extending rather more than half an inch to the left of the λ.

The introduction treats of the meaning and uses of such words as *πάθος*, *νόσημα*, *ἀρρώστημα*, *νόσος*, *κ.τ.λ.*, and the first portion of the treatise itself is occupied by a statement of the views of a large number of earlier writers on the origin of diseases. This section occupies about eighteen columns, nearly half the total extent of the work, and contains a large number of references to the medical writers of Greece, which, if they can be satisfactorily restored, should be of considerable interest. The authors named are as follows: Euryphon of Cnidus, Herodicus (apparently also described as of Cnidus, but usually referred to Selymbria), Hippocrates (*καθὼς διεληφθεὶς περὶ αὐτὸν ὁ Ἀριστοτέλης* and also *ώς αὐτὸς Ἰπποκράτης λέγει*), Alcamenes *ὁ <Α>βυδηρός* (*ώς φησι π[ερὶ] αὐτοῦ Ἀριστοτέλης*, but his name does not occur in Aristotle, nor does he appear to be mentioned elsewhere), Timotheus of Metapontum (*καθὼς φησι περὶ αὐτοῦ ὁ αὐτὸς φιλόσοφος*, consequently not the Timotheus known as physician to Mithridates, but an earlier and otherwise unknown writer). These names occur on the first continuous portion of the papyrus. These seven columns which apparently follow mention*οἱ Ἡλεῖοι* (the portion of papyrus containing the name is torn away), Plato (whose views not only on the origin of disease but also on the structure of the body are given at great length, but the text is much mutilated), Philolaus of Croton, Polybus, and Menecrates *ὁ Ζε[ις ἐπι]κληθεῖς*. Of the two fragments whose exact position is not certain, the larger contains the names of Ολ.....ς (the exact size of the lacuna is doubtful) of Sardis, Dexippus of Cos, and Phasitas (so MS. apparently, but the name is unknown) of

Tenedos: the smaller those of Herodicus (possibly *Πρόδικος* should be read instead) and *ὁ Αἰγύπτιος Ναυ-*. The conclusion of the historical section of the treatise is found at the beginning of the long continuous portion of the MS., and the final names mentioned in it are those of Petron and Philistion.

It will be observed that references are made to Aristotle for the opinions of three writers, Hippocrates, Alcamenes and Timotheus, and in no case is the passage referred to be found in the extant works of that philosopher. The work from which the citations are made is, however, probably not one of Aristotle's authentic works, but the *ἰατρικὴ συναγωγὴ* which Galen (*Comm. ad 1. Hipp. de nat. hom.*, Kühn, vol. xv. p. 25) says bore the name of Aristotle, but was known to have been actually written by his disciple Menon. In this volume the opinions of former medical writers were collected (*ὅ Μένων ἐκεῖνος ἀναγηγήσας ἐπιμελῶς τὰ διασωζόμενα κατ' αὐτὸν ἔτι τῶν παλαιῶν ἱατρῶν βιβλία, τὰς δόξας αὐτῶν ἐκεῖθεν ἀνελέξατο*). It is probable that Menon's compilation is the basis of most of the first section of the present treatise, though it is also clear that, in some cases at least, the writer referred to the actual works of the authors named.

With the close of the fourth century B.C. the writer apparently ended his historical survey; and it may be observed that after this point the compilation of Menon would cease to be available. The second or constructive section of his treatise follows. The precise beginning of this section is hopelessly mutilated, but the subject with which it opens is the elements out of which the human body is composed. Reference is made to the rival views of Herophilus and Erasistratus, the writer preferring the former; indeed a considerable portion of this section of the work is occupied with refutations of the Erasistratean school of medical science. References are also made, more than once, to Aristotle, Asclepiades *ὁ οἰνοδότης* (who is also an object of attack, and is in one passage stated *πειράσθαι κατὰ τὸν τ<ρ>όπον κανολογεῖν*), and Alexander *ὁ φιλαλήθης* or *φιλαλήθεος*, who is the latest author quoted in this work (end of first century B.C.). It is impossible at present to give anything like a detailed analysis of the writer's exposition of his views, but the main subjects of which he treats are as follows.

(1) The composition of the body: *ἱμᾶν δὲ λεκτέον ὡς τῶν σωμάτων τὰ μέν ἔστιν* (MS. *εἶναι*) *ἀπλᾶ, τὰ δὲ [σύ]νθετα, πρὸς αἰσθησιν τούτων λαμβανομένων. ἀπλᾶ μέν οὖν ἔστι τὰ*

όμοιομερῆ, κατὰ τὰς τομὰς διαιρούμενα εἰς ὅμοια μέρη, ὡς ἔγκέφαλος καὶ νεῦρα καὶ ἀρτηρία <καὶ> φλέψ καὶ τὰ ὑγρά· ἔκαστον γὰρ τούτων καὶ ὁμοιμερές ἔστι καὶ τεμνόμενον εἰς ὅμοια χωρίζεται μέρη]. σύνθετα δὲ ἐστὶ τὰ ἀνορομερῆ ἡ τὰ κατὰ [τὰς] τομὰς εἰς ἀνόμοια χωρίζομενα μέρη, ὥσπερ σκέλος, κεφαλῆ, ἡπα[ρ, τυ]γένιων, ἔκαστον τῶν τοιούτων [καὶ γὰρ ἀνόμοιομερῆ ἔστι καὶ κατὰ τὰς τομὰς εἰς ἀνόμοια χωρίζεται] μέρη. After a mutilated passage in continuation of this topic he proceeds to show that ἀποφορὰ ἀπὸ τῶν σωμάτων γίνεται συνεχῆς. To supply this waste two powers exist, πνεῦμα καὶ τροφή, which are discussed at length.

(2) The action of the breath (πνεῦμα), which is drawn in [νέποτης ῥυνός]ς καὶ τῶν μυκτήρων, καὶ δι[α] τὰς τρι[αχ]είας ἀρτηρίας φέρεται εἰς τε πνεύμονα καὶ καρδίαν ἔτι δὲ θύρακα διηθ[εῖ, ἔτι] δὲ καὶ εἰς κοιλίαν ὀλίγον διὰ τοῦ [στομά]χου—καθ' ἡμᾶς, οὐ μὴν δὲ κατὰ τὸν Ἐρασιστράτον. ἀπὸ τούτων δὴ τῶν τόπων φέρεται [εἰς] τὰς κατὰ μέρος ἀρτηρίας, φέρεται δὲ καὶ εἰς τὰ κοιλώματα, ὡς ὅμοιος δὲ καὶ εἰς τὰ καθ' ὅλοι τὰ σώματα ἀραώματα· εἴτα διεκθεῖ διὰ τῶν ἐν τῇ σαρκὶ φυσικῶν ἀραωμάτων εἰς τὸ ἔκτος, τὸ δὲ πλειόν ἐκπενίται διὰ τε τοῦ στόματος καὶ τῶν μυκτήρων. Under this heading the views of Aristotle as to the physical cause of sleep and wakening are quoted.

(3) τροφή. The first portion of this is fairly perfect: τεμνομένη μὲν πρὸς τῶν προσθίων ὀδόντων (τομεῖς καλούνται), καταλεανομένη δὲ πρὸς τῶν αὐτῶν, λοιπὸν καταπίνεται διὰ στομάχου καὶ φέρεται εἰς κοιλίαν, κανὸν ταύτη δὲ μεταβάλλεται καὶ ἀποικεῖ<ού>ται χυλομένη ἐπὶ τὸ οἰκεῖον. καὶ γὰρ ἀρέσκει ἡμῖν τὴν τροφὴν εἰς κοιλία μεταβάλλειν τε ἐπὶ τὸ οἰκεῖον κανὸν ταύτη δεύτερας κατεργασίας τυγχάνειν οὐχ ὥσπερ δὲ Ἀσκληπιάδος ὁ οἰνοδότης (MS. δωτῆς) καὶ Ἀλέξανδρος ὁ φιλαγήθεος δέλαβον ὡς τέμνεται μόνον καὶ χυλοῦται ἡ τροφὴ ἐν κοιλίᾳ καὶ προδιάθεσίς τις αὐτῇ γίνεται, οὐ μὴν ἀποκείωσις εἰς τὸ οἰκεῖον. The further progress of assimilation is pursued after a short digression: ἀναλαμβανομένη δὲ πρὸς τῶν ἀγγείων τῶν ἀπὸ τοῦ μεσοντερίου μὲν ἐκφύνονται, ἐμφύνονται δὲ εἰς τὴν κοιλίαν, προστίθεται τῷ ὅλῳ σώματι. καὶ μὴν [καὶ ἀτμοειδῶς διὰ τῶν ἀρτηρῶν]άτων [τῶν] εἰν τῇ κοιλίᾳ ἀναλαμβάνεται ἡ τροφὴ, κ.τ.λ. The writer then defines his difference from the opinions of Asclepiades and Erasistratus. A controversy ensues on the following point, interesting on account of its relation to the ancient view of the functions of the arteries and veins: καὶ οὐ μόνον ἀπὸ τούτων (the stomach and intestines) ἀνάδοσις γίνεται καὶ πρόσθετος, ἀλλὰ καὶ ἀπὸ τῶν ἐν τοῖς ἀγγείοις παρακειμένων, καὶ ἀπὸ τῆς ἐν ταῖς φλεψὶ παρακειμένης τροφῆς καὶ ἀπὸ τῆς ἐν ταῖς ἀρτηρίαις ἀνάδοσις γίνεται καὶ πρόσθετος

τῷ ὅλῳ σώματι καὶ ἀτμοειδῶς... ὁ μέντοι γε Ἐρασιστράτος οὐκ οἴεται ἀνάδοσιν γίνεσθαι ἀπὸ τῶν ἀρτηρίων· μηδ γὰρ εἶναι κατὰ φύσιν ἐν αὐταῖς αἷμα (τοῦτο δὲ τροφὴ) ἀλλὰ πνεῦμα. The discussion of this question occupies more than three columns, and is considerably mutilated in parts. A badly mutilated passage follows, and then the subject under discussion is

(4) ἀποφορά, the emission of particles from the body, which is established by reference to the waste experienced by all organic bodies, and to the theory of scent. Incidentally a discussion occurs with the Erasistrateans, who maintained that decrease of a body's weight did not necessarily imply the loss of some substance, since in some cases the addition of a substance (viz. air or spirit) made a body lighter. The following columns are seriously mutilated, and it is difficult to trace the thread of the argument: but towards the end we find a discussion of the efficacy of certain cathartics, including hellebore and castoreum, and of the method in which our bodies receive heat or cold from the surrounding air. The whole treatise concludes with a brief and mutilated argument on the existence in the body of λόγῳ θεωρητοὶ (in addition to αἰσθητοὶ) πόροι, the final words being φανερὸν τοιγάρτοι ἐκ τούτων καὶ τῶν τούτων παραπλησίων ὡς λόγῳ θεωρητοὶ πόροι εἰσὶν ἐν ἡμῖν καὶ παντὶ ζῷῳ.

The date of the treatise can apparently be determined within tolerably narrow limits. The latest author quoted in it is Alexander Philalethes, who belongs to the end of the first century B.C., which gives a superior date for the composition of the treatise. The inferior limit can be fixed by two considerations. In the first place the omission of the name of Galen from a work abounding in references to preceding medical writers is unaccountable except on the theory that it was written before his date. Secondly it does not seem possible, on palaeographical grounds, to place the MS. later than the second century of our era. The hand in which it is written, as already mentioned, recalls that of the principal scribe of the Ἀθηναίων πολιτεία, which probably belongs to quite the last years of the first century. The spelling is very accurate, and the adscript is regularly written,—both signs of a comparatively early date. Further, the writing of the document on the *verso*, already referred to, is of a type which can hardly be later than the second century; and this implies an earlier date for the treatise on the *recto*. It appears therefore that both the treatise itself and the present MS. of it

must be assigned to dates within about the first 150 years of our era.

The circle to which a Greek medical treatise appeals is not large, as is shown by the fact that so many such works are known to lie unedited in various libraries, and that even the greater authors are, for the most part, inadequately edited. Even Galen waits for the completion of Prof. Iwan von

Müller's promised *opus magnum*. But for those whom the subject interests the MS. now described, with its numerous allusions to the Greek writers on medical science, should be of considerable value, and at any rate requires fuller investigation.

F. G. KENYON.

BRITISH MUSEUM, April 1892.

MR. ADAM AND MR. MONRO ON THE NUPTIAL NUMBER OF PLATO.

MR. MONRO's careful review of my pamphlet on the Number of Plato seems to make it incumbent on me to state how I propose to meet the arguments which he has adduced against the theory I have put forward.

After giving reasons for rejecting my interpretation of four phrases, viz. (1) ἔκατὸν τοσαντάκις, (2) ἐπίτριτος πυθμῆν περιπάδι συζυγεῖς, (3) τρὶς αὐξηθεῖς, (4) τρεῖς ἀποστάτεις, Mr. Monro adds: 'Such then are the objections to which the several parts of Mr. Adam's interpretation seem to me to be open. I have only further to point out that if any of them is valid, it is probably fatal to the theory as a whole.' These last words are not (I think) correct as regards the phrase ἐπίτριτος πυθμῆν περιπάδι συζυγεῖς: provided this phrase means 60, it does not affect the theory as a whole whether the language is to be explained as $(3+4+5) \times 5$ or as $3 \times 4 \times 5$ or in the way which will presently be indicated. Nor again is it true that the theory as a whole falls to pieces if I am wrong in ἔκατὸν τοσαντάκις, provided the first ἀρμονία can be otherwise shown to be equal to the second, and a similar remark will apply to ἀποστάτεις. But it is assuredly true that unless τρὶς αὐξηθεῖς means 'after being three times increased, i.e. multiplied by itself,' my whole theory is false. Mr. Monro has put the truth very clearly when he says: 'It is evident that, as soon as the separate explanations have been given, the total explanation must either follow without effort, or'—here only I disagree—'become demonstrably hopeless.' It is because this is the one point of my theory which seems to me to make the total explanation follow without effort (since 60^4 is equal to 4800×2700 , while no cube number is) that I am ready to stake the whole theory on the sentence: '60 τρὶς αὐξηθεῖς is 60^4 '.

Of my explanation of 60 τρὶς αὐξηθεῖς as 60 thrice multiplied by itself, i.e. raised to the fourth power, Mr. Monro says: 'Mr. Adam's contention is logical, but it is not in accordance with the *usus loquendi*, which in this and many similar cases follows the inclusive method of reckoning.' In support of this he quotes Euclid ix. 8 ἐὰν ἀπὸ μονάδος ὅποισαν ἀριθμοὶ ἔχῃς ἀνάλογον ὅστιν, ὃ μὲν τρίτος ἀπὸ τῆς μονάδος τετράγωνος ἔσται κ.τ.λ. What Euclid means is this: if for instance we have the series 1, 60, 60^2 , etc., in which $1 : 60 :: 60 : 60^2$, then the third number from unity will be 60^2 . From this we can certainly infer that 60^2 was called the second number from 60, and 60^3 the third number from 60: but how does this help us? We are dealing, in τρὶς αὐξηθεῖς, not with the third number, but with the third increase (*τρίτη αὔξη*). Mr. Monro seems to infer that Euclid could have called 60^3 the third increase from 60, because he would call (for example) 60^2 in the series 1, 60, 60^2 the third number from unity. But is αὔξη merely a synonym for ἀριθμός? If it is, as Mr. Monro's argument supposes, then Euclid might have called 60^2 the τρίτη αὔξη as well as the τρίτος ἀριθμός from unity; will the *usus loquendi* (not to speak of logic) bear this out? Did any Greek ever use τρίτη αὔξη of a square number? It is Mr. Monro, not I, who interprets τρὶς αὐξηθεῖς differently from τρίτη αὔξη: for just as surely as 60^3 and not 60^2 is τρίτη αὔξη of unity, so surely is 60^4 and not 60^3 τρίτη αὔξη of 60 i.e. 60, τρὶς αὐξηθεῖς.¹

Mr. Monro rejects Schneider's interpreta-

¹ The passage of Archimedes, to which Mr. Monro refers, is cited in Nesselmann (*Aly. d. Griechen* p. 124, note 16). It is, as Mr. Monro says, similar to the passage quoted from Euclid; and what I have said of the one will apply to the other. Nesselmann's remarks on pp. 125 and 161 (where he refers to the passage in Euclid) are entirely right and in full harmony with my theory.

tion of the passage in the *Politics* (v. 12. 1316^a), *τούτων ὁ ἐπίτριτος πυθμὴν . . . παρέχεται, λέγων ὅταν ὁ τοῦ διαιρέματος ἀριθμὸς τούτον γένηται στερεός*, in favour of a view which does not even pretend to explain the construction of *ὅν* in Aristotle nor the reference in *τούτων*. The notion that Plato's Number is demonstrably insoluble can only be defended on the assumption that this passage of the *Politics* is demonstrably insoluble too. If there is anything clear about the Number, it surely is that *ὅν* in Plato has for its antecedent *αὐξήσεις* and *ὅν* in Aristotle has for its antecedent *τούτων*, in which case *τούτων* means *αὐξήσεις* and Schneider's interpretation of Aristotle is established. Perhaps I may be allowed to say that my interpretation—essentially the same as Schneider's—of the passage in Aristotle was arrived at independently of Schneider, and also to add that Schneider had not the same temptation to go wrong as I had, because he takes the ordinary view of *τρὶς αὐξηθεῖς*. And if *τρὶς αὐξηθεῖς* is so simple as Mr. Monro thinks, why should Aristotle have troubled to explain it? Aristotle does not explain it, because it would be irrelevant to his purpose to do so. Would indeed that he had stopped to explain it, whether relevant or not! But Aristotle's purpose is to explain *τούτων* (*i.e.* *αὐξήσεων*), not *τρὶς αὐξηθεῖς*. Mr. Monro remarks 'Aristotle must have quoted the words which he thought the most important': but he does *not* quote *τρὶς αὐξηθεῖς*, which (according to Mr. Monro) he seeks to explain: further 'the comment or paraphrase which follows must refer to those words' (*that is*, which he quotes), but Mr. Monro makes it refer to *τρὶς αὐξηθεῖς* which Aristotle does *not* quote: finally Mr. Monro, admitting that 'Aristotle indeed does not quote *τρὶς αὐξηθεῖς*', remarks that 'the gloss' *λέγων κ.τ.λ.* 'includes them': but does not the writer even of 'a gloss' quote the words which he proposes to explain? Aristotle is not writing 'a gloss' on the words *τρὶς αὐξηθεῖς*—which require no gloss—but a clause explanatory of the *αὐξήσεις* in Plato. He virtually quotes *αὐξήσεις* when he says *τούτων ὅν*, since the antecedent of *ὅν* in Plato is *αὐξήσεις*. I have therefore nothing to retract in my explanation of *τρὶς αὐξηθεῖς*.

The case is different with *έκατὸν τοσαντάκις*, and I admit that Mr. Monro has shown that my explanation—in which I took *έκατὸν τοσαντάκις* as epexegetic not of *ἴσηριςάκις* but only of *ἴσακις*—of this phrase was wrong. But the ordinary explanation of

έκατὸν τοσαντάκις—'a hundred taken that number of times, viz. 100 times'—is by no means 'unassailable.' Does this ordinary interpretation regard *έκατόν* as accusative or genitive? If accusative (to which its relation to *ἴσηρις* would on this theory point), is there any example in Plato of such a way of describing a square? Certainly throughout the *Meno* the size of a square is always expressed by means of the *genitive case* (denoting its sides), *e.g.* 82 C *δυοῖν δις ποδῶν*, 83 C *τεττάρων γύρῳ* (not *τέτταρα*) *τετράκις ἑστὶν ἑκατόνεκα*, 83 E *τὸ ὅλον χωρίον τριῶν τριῶν ποδῶν γύρεται*. Or is *έκατόν* here regarded as in the genitive case? If so, are there any cases in classical Greek of an indeclinable word like *έκατόν* used outside nom. acc. and voc. case without an article or other word to replace inflexion? What then is the true explanation of the phrase *ἴσηριςάκις*, *έκατὸν τοσαντάκις*? *τοσαντάκις* must derive its meaning from a number mentioned before, as Mr. Monro says, and why not from *ἴσηριςάκις*? Call *ἴσηριςάκις* *x²*, then *έκατὸν τοσαντάκις* is *100 x²*. And if *100 x² = 4800 × 2700*, *x* is 360 and the first *ἀριθμὸν* is then *360² × 100*. The whole phrase is equivalent to *ἴσηριςάκιςέκατοντάκις*. The one harmony is *one hundred times* a square, while the other is a rectangle whose sides are *one hundred times* 48 and *one hundred times* 27. Two further points are gained by this explanation. In the first place the side of Plato's square gives the number of days (360) which he counts in the year—whereby we can convert the days of his Great Year into years (the *magnus Platonicus annus* of 36000 years, as it was actually called in the sixteenth century), and in the second place the number 100—the natural duration in years of human life, as Plato thought—appears for the third time, making the balance *έκατὸν τοσαντάκις—έκατὸν μὲν ἀριθμῶν—έκατὸν δὲ κύβων* complete.

There remain *τρεῖς ἀποστάσεις* and *ὅν ἐπίτριτος πυθμὴν κ.τ.λ.* As regards the first of these I am grateful to Mr. Monro for pointing out that my explanation of the *ἀποστάσεις* in part 2 of the discussion is apparently inconsistent with my explanation in part 1. The explanation given in part 2 was the one which I had in my mind throughout, but the plan—adopted for the sake of clearness—of keeping the solution as far as possible distinct from the significance of the Number led me to insist too much on Fig. vi. on p. 34. In the middle paragraph of p. 54 I think I have reconciled the two apparently inconsistent figures (vi. and ix.). Briefly, in the third, fourth, and

fifth months the child receives increases represented by 3^3 , 4^3 , and 5^3 . The only evidence—I still think it is enough—that this was Plato's idea is the passage in Censorinus (with its confirmations in Aristides) and the precise applicability of that passage to the words of Plato. I should add that the *όροι* of Fig. ix. were intended to be the same as the *όροι* of fig. vi., to which figure two *ἀποστάσεις* might be prefixed representing the first and second months after conception. The word *ἀπόστασις* by itself surely does mean only 'distance from' and not, as Mr. Monro says, 'ratio': in the *Timaeus* 43 D the notion of ratio is given to it by *τοῦ διπλασίου καὶ τριπλασίου* and similarly in *Rep.* 587 D Plato means the 'distance of the king from the tyrant' in point of happiness—although the *measure* of the distance must in such a case be expressed by a numerical ratio, since one cannot say *e.g.* 100 miles distant in point of happiness. There seems to be nothing gained by giving to *ἀπόστασις* a secondary meaning which its derivation does not warrant nor its usage require.

Mr. Monro remarks of my discussion as to *ἐπίτριτος πνθμήν*: 'There is nothing in the Greek to suggest adding the sides of the triangle together: there is nothing in *ἐπίτριτος πνθμήν* to imply the hypotenuse 5: and there is no parallel to lead us to take *συζυγεῖς* to mean "multiplied." As for *συζυγεῖς*, the word in reality means only "married to": the *ἐπίτριτος πνθμήν* is conceived of as marrying *πειράς* and begetting thereout by multiplication these twain harmonies which nevertheless are one. The fancy is of course extravagant, but the image is both appropriate here and extremely common in Plato (see *e.g.* *Theaet.* 156 D ff.), and Aristides tells us that the number 6 was called marriage because it is the product of the first male and the first female number ($3 \times 2 = 6$). To Mr. Monro's remarks on my theory of *ἐπίτριτος πνθμήν* I might reply that there is in the Greek *ῶν* and *πνθμήν* as well as *ἐπίτριτος*, and that *ῶν πνθμήν* might fairly be regarded as the *πνθμήν* of the *αὐξήσεις*—which I took to be $3^3 + 4^3 + 5^3$, whose *πνθμήν* it is reasonable to regard as $3 + 4 + 5$. But my account of *ῶν ἐπίτριτος πνθμήν* is (I now think) wrong. A strenuous interpretation of the words of Plato must make *ῶν* refer to the *αὐξήσεις* of the child: now Plato speaks of 9 *αὐξήσεις*, viz. 3 in each of the three months to which he alludes—that is (starting from the *όροι* which separate the months), in each month a linear *αὐξήσης*, a squaring *αὐξήσης*, and an

αὐξήσης making the child solid: *βάθος γὰρ ἡ σύμματος φύσις*. This may be ludicrous from the point of view of modern science (like much else in Plato), but it is precisely the way in which the Pythagoreans conceived of the generation of solids, and even Plato himself: see *Timaeus* 53 C foll. *ῶν* then means 'of nine' and what is *ἐπίτριτος πνθμήν*? Simply 'four-thirds.' In point of fact Nicomachus (p. 134 ed. Ast) expressly calls 12 the *πνθμήν ἐπίτριτος* of 9, as 6 is the *πνθμήν ἡμιόλιος* of 4. I therefore regard the solution of the two parts of the Number as $3^3 + 4^3 + 5^3 = 216$ and $\{(\frac{4}{3} \text{ of } 9) \times 5\}^4 = 360^2 \times 100 = 4800 \times 2700$.

Opinions may differ as to the kind of jest which Plato meant when he wrote the Number: they ought not to differ on the question whether he is jesting or not, since he says he is. For my own part, I think it a poor joke in a work like the *Republic* to propound a problem which is demonstrably insoluble; it is a frigid jest whose only point is its insolubility. The Nuptial Number, like many other of Plato's loftiest passages, is half-serious and half-playful: Plato may have smiled at these 'Babylonian numbers' without entirely disbelieving in their results, as I think we can see from the *Timaeus*. But the Number was one of those jests which (as readers of Proclus know) came to be taken seriously: and parts of it, such as the ideas of man's relation to the *θεῖον γεννητόν* and the *ἀρκατάστασις* of all things when the *ἀριθμὸς γεωμετρικός* is fulfilled, are not wholly without parallel in modern Christian belief.

JAMES ADAM.

THE courtesy of the Editor having given me the opportunity of seeing the preceding Reply, I add the following remarks, which I have made as brief as possible.

1. Mr. Adam is doubtless right in regarding his view of *τρὶς αὐξήσεις* as the most vital part of his theory. In his Reply he has not addressed himself as directly as I should have expected to the defence of the paradox (for such I must call it) that *τρὶς αὐξήσεις* means 'raised to the fourth power,' while *τρίτη αὔξη* denotes the third power. His criticism of the passage which I quoted from Euclid certainly does not furnish such a defence. He accounted for *τρίτη αὔξη* by postulating a series of the form

$1 + a + a^2 + a^3 + \&c.$,
where a^3 is the fourth term but the third 'increase.' I noticed the want of any evi-

dence that this was the basis of the phrase *τρίτη αὔξη*, and went on to quote Euclid in order to show that if such a series had been in question the inclusive method of reckoning would have re-asserted itself. The point of course is that Euclid calls a^2 not the third number or term of the series—which would be logical—but the *third from unity*. This is surely an illogical use (since the first term is not the *first from unity*), identical in principle with the illogical use (as I understand it) of *τρίτη αὔξη* and *τρὶς αὔξηθείς*. But my argument does not rest on the passage of Euclid, which is one of many examples of the *usus loquendi*, and only specially appropriate in view of Mr. Adam's series $1 + 60 + 60^2$ etc. Our own use of the term 'third power' is at least as good a parallel, especially as power itself originally meant the square. I need not say that the convention by which a is regarded as a^1 had nothing to do with establishing this usage. On the other hand Mr. Adam's whole case rests on the argument that there can be no similar want of logic in the use of the phrase *τρὶς αὔξηθείς*.

2. It still seems to me certain that Aristotle's comment *λέγων κ.τ.λ.* refers to the sentence which he has just quoted, and that he includes in the reference the words *τρὶς αὔξηθείς*, though his quotation stops short of them. I do not see what proof of this is needed beyond placing the two passages together. We have:—

Plato's sentence

‘*ῶν ἐπίτριτος πνθμὴν πεμπάδι συζυγεῖς δύο ἀρμονίας παρέχεται τρὶς αὐξηθεῖς.*

Aristotle's quotation and comment

‘*ῶν ἐπίτριτος πνθμὴν πεμπάδι συζυγεῖς δύο ἀρμονίας παρέχεται, λέγων ὅταν ὁ τοῦ διαγράμματος ἀριθμὸς τούτου γένηται στερεός.*

Mr. Adam makes a great deal of the omission of *τρὶς αὔξηθείς* by Aristotle; though he himself takes Aristotle's comment to refer to *αὔξησις δυνάμειαι κ.τ.λ.*—words which are not only not quoted by him, but are in the sentence preceding the words quoted. But Aristotle did not wish merely to explain *τρὶς αὔξηθείς*. He wished to explain how, as he understood Plato, the *ἐπίτριτος πνθμὴν πεμπάδι συζυγεῖς* (the Pythagorean triangle) furnished two harmonies. Plato says *τρὶς αὔξηθείς*, 'by being thrice increased.' Aristotle substitutes for this the more explicit 'when the number of this diagram has become solid.'

I may say here that I nowhere spoke of the phrase *τρὶς αὔξηθείς* as a particularly simple one. It appears that *τρίτη αὔξη* is an

ordinary expression for cubing, since it occurs more than once in that sense. I take it that *τρὶς αὔξηθείς* is a variation on *τρίτη αὔξη*, suited to the affected style of the passage. For I cannot think, as Mr. Adam does, that the Nuptial Number is couched in the ordinary mathematical language of the time.

I will not enter upon the question whether Aristotle understood Plato's Number, or thought that he did. His language seems to me very guarded. But I must point out that Mr. Adam is somewhat misinterpreting Aristotle when he says that he 'admits that the Number of Plato actually does give a correct reason for the change of constitutions in general.' Aristotle certainly says *τοῦτο μὲν ὅντις αὐτῷ λέγων οὐκώς*, but this refers to the immediately preceding words *ὅτι τῆς φύσεως ποτε φυούσης φαίλους καὶ κρείττους τῆς παιδείας*. This is clear from the next words, *ἐνδέχεται γὰρ εἶναι τινας οὓς παιδευθῆναι καὶ γενέσθαι σπουδαίους ἀδύνατο*. Thus Aristotle only admits that there may be changes because nature from time to time fails to furnish adequate material.

3. Mr. Adam has changed his view of the words *ἴσην ισάκις ἑκατὸν τοσαντάκις*, which he now takes to be equivalent to *ἴσην ισάκις ἑκατοντάκις*—a square number taken a hundred times. I cannot follow this. Surely *ἴσην ισάκις* is meant to tell us that the harmony is a square, and *ἑκατὸν τοσαντάκις* to tell us what square it is; just as with the second harmony we are first told that it is oblong, then of what factors it consists.

4. The new explanation of *ῶν ἐπίτριτος πνθμὴν* is also, in my view, untenable. Even supposing that *ῶν* can mean the number 9 because nine *αὔξησις* have been referred to, I cannot admit that 12 could be called the *ἐπίτριτος πνθμὴν* of 9. The number 12 is *ἐπίτριτος* of the number 9, and the ratio 12 : 9 is an *ἐπίτριτος λόγος*, but the only *ἐπίτριτος πνθμὴν* is the ratio in its lowest terms, viz. 4 : 3. Mr. Adam has misconstrued the passage of Nicomachus to which he refers (p. 134 *Ast*), as he will see on further consideration. Nicomachus is comparing the series of squares 1, 4, 9, etc., and the series of so-called oblong numbers, 2, 6, 12, etc., which are mean proportionals between successive squares. Speaking of the ratio of each oblong to the corresponding square he says *πρώτον πνθμὴν πολλαπλάσιος (2 : 1), δεύτερος δὲ δευτέρου ἡμιόλιος (6 : 4), τρίτος δὲ τρίτου ἐπίτριτος (12 : 9)*, and so on. Mr. Adam supposes *πνθμὴν* to be understood with *ἡμιόλιος*, *ἐπίτριτος*, etc., but wrongly. These words govern a genitive in the sense of

'half as much again as,' 'four-thirds of,' etc., and this is the construction here; as is shown by another sentence a little later on the same page, where Nicomachus goes on to remark that these ratios are given in terms which increase progressively. Thus, he says, *πρῶτος μὲν πρώτον πυθμένα πολλαπλάτιον ἔξει, δεύτερος δὲ δευτέρου δεύτερον ἀπὸ πυθμένος ἡμιόλιον, τρίτος δὲ τρίτου τρίτον ἀπὸ πυθμένος ἐπίτριτον, κ.τ.λ.* That is to say, 6 : 4 is the second *ἡμιόλιος λόγος* from the *πυθμήν* (3 : 2), 12 : 9 is the third *ἐπίτριτος λόγος* from the *πυθμήν* (4 : 3), and so on.

5. The meaning of *περπάδι συγγείς* will be best considered when we are agreed about *ἐπίτριτος πυθμήν*. I may say that I merely noticed, as one of several weak points, the want of evidence that *συγγείς* could imply multiplication. The strength of my argument here lies in the aptness of the words *ἐπίτριτος πυθμήν περπάδι συγγείς* as a description of the triangle whose sides are 4 and 3 and hypotenuse 5.

6. Similarly with *ἀπόστρασις*—I do not say that it could not mean distance from a point to another, but only that in the two other mathematical passages in Plato where it occurs it denotes the ratio between two magnitudes. The discrepancy between fig. vi. and fig. ix. seems to me to be more than an apparent one, and to involve giving up Mr. Adam's explanation of the three *ἀποστάσεις* and four *ὅροι*. On the view represented by fig. vi. the *ἀποστάσεις* lay along a line. Mr. Adam

bade us take them up tenderly and lift them with care, when they would arrange themselves in the Pythagorean triangle (fig. vii.). He now makes them all start from the same point (fig. ix.). Under this rough usage the Pythagorean triangle becomes impossible here, and the case is proportionately strengthened for finding it in the next part of the passage.

7. Whether the Nuptial Number is a good joke or not, I would press this point. Plato does not merely warn us that it is a joke. He distinctly seems to imply that the point of the joke lies in the use of high-sounding scientific language which is nevertheless without meaning. The Muses do not give us serious mathematics in a playful manner—smiling at their Babylonian numbers, as Mr. Adam puts it. Their language is lofty and serious (*ώς δὴ σπουδῆ λεγόντας ὑψηλογογυμένας*), but they are really jesting and trifling with us (*ώς πρὸς παῖδας ἡμᾶς παιζόντας καὶ ἐρευχηλούντας*). I agree (as I have already said) that Plato is probably half-serious. But if he had had a clear and consistent mathematical sense to convey, he would have been wholly serious, as he is in other mathematical passages. Mr. Adam has done something to illustrate the serious side, and would probably have done more if he had not attempted to explain everything: *πλέον ἡμισυ παντός*. The significance of the Platonic Number is not dependent on the completeness of its solution.

D. B. M.

ON THE STUDY OF GREEK LYRIC METRE.

THE study of Greek metre has hitherto been grievously and unreasonably neglected in this country and, for want of a better advocate, I wish to say a few words in its defence: practically, to show that a great deal of metrical knowledge might be taught with advantage even in schools, a large part of the subject being both easy and simple and likely to help the learner to a better appreciation of ancient poetry; and theoretically, to call attention to some principles which seem to me to render the study less nebulous, baseless and generally unsatisfactory than it has appeared to be in the luebrations of some of its exponents. I take the practical question first, namely, what parts of metrical science are easily taught and worth knowing—worth knowing,

that is, for people who are neither technical musicians nor scholars by profession, but for whom classical literature is part of an ordinary liberal education.

It is, I believe, the practice in schools to ignore altogether the metre of the choragic parts in Greek tragedy. Only in a few schools, and there only in the highest form, is the subject touched at all. No one can deny that there are passages and even large tracts of choragic verse which are metrically very difficult, and where the difficulties are complicated by textual and grammatical questions—the whole being quite beyond the capacities of schoolboys. But is that a good reason for neglecting the metre of all? There are also large tracts and whole odes which without being hard to

construe are as easy metrically as many English lyrics, in which knowledge of the metre—or at all events appreciation of the general metrical or rhythmical effect—would be insisted upon by any reasonable teacher. Who would tolerate the unmetrical reading of these lines, as if they were so much florid prose ?—

Since the songs of Greece fell silent, none
like ours have risen;
Since the sails of Greece fell slack, no
ships have sailed like ours:
How should we lament not, if her spirit sit
in prison?
How should we rejoice not, if her wreaths
renew their flowers?

To teach a boy to read these lines with some sense of their rhythm is neither more nor less difficult, one would think, than to teach him the structure or general effect of trochaic tetrameters. And yet fairly intelligent boys who have spent years over Greek poetry scarcely know a trochee from an anapaest when they see it! Trochaic systems for the chorus are often quite as simple as tetrameters: but of course they know nothing whatever about their construction. To begin at the beginning, they are not taught to recognize in Greek lyrics a thing which they must know in modern singing or music, if they have any training in these at all.

This is the not very obscure or recondite phenomenon which the Greeks called *τονί*, the contraction of a foot into one syllable or the prolongation of a single syllable to the duration of a complete foot or bar. A great deal of choric poetry becomes at once comparatively graceful and intelligible by the revelation of this simple fact—a fact which no teacher who knew it could have the slightest difficulty in making audible to his scholars. Any one who knows a long syllable from a short can be easily made to understand what a still longer syllable is, — or ,, — or —. Perhaps the best plan for beginners would be to have texts in which *συλλαβαὶ τρίσημοι* and *τετράσημοι* were followed by a hyphen, a notation adopted by Reiter (*Dissert. Vindob. 1887*):

έπει δ' ἐπεμ-νησάμην ἀμειλίχων,
έπει δ' ἀναγ-κας ἔδυ λέπαδνον
αἰωρ-ήσ-ασα τούμὸν ὅμμα.

It is the more irrational to ignore *rovj* because it occurs in modern English verse. Mr. George Meredith has written some lyrics, in the versification of which *rovj* is conspicuous:

Water, first of singers, o'er rocky mount
and mead,
First of earthly singers, the sun-loved rill
Sang of him.

—(*Poems and Lyrics*, 1883, p. 73,
‘Phoebe with Admetus.’)

It occurs more irregularly in 'Love in the Valley' (*ib.* p. 87 f.):

Lovely are the curves of the white owl
sweeping

Wavy in the dusk lit by one large star
* * * *

Thicker crowd the shades while the gráve
 East deepens
Glowing, and with crimson a lóng clóud
 swélls.¹

A few passages like these dictated and read in English would make the effect obvious.² When *τονί* has been made clear to the learner, and when the equally easy conception of an anacrusis has been explained to him, he is in a position to construe metrically a large number of choric¹ passages, especially in Aeschylus. The beginning of metrical teaching should be this explanation of *τονί* and its application to simple trochaies. Even an obtuse pupil would be encouraged to persist by the vague feeling that he had gained something worth having, and that what seemed turgid and eccentric prose had become something much more artistic and pleasing to the ear—he might still be a long way from thorough appreciation of the

¹ This, by the way, is a passage which an editor of Statius would do well to quote on *Thebais* i. 342—

sed nec puniceo redditum nubila caelo
promiserem iubar, nec rarescentibus umbris
longa repercuso nituere crepuscula Phoebo.

² In an accentual language like English *torv* is less clearly marked, and it is a more difficult effect for a poet to handle successfully, than in the quantitative verse of Greece. There, it can generally be detected with certainty and precision. In English an interpretation is sometimes possible which avoids it or places it differently. Thus the line.

'Thicker crowd the shades while the grave East
deepens,'

or —v —v —vv L L —v

But 'while the grave East' is unsatisfactory, and the intention of the poet was no doubt the other. In other places in the same poem I take it that Mr. Meredith meant the line to begin with double *rovñ*:

‘Wild cloud mountains that drag the hills along.’
This is common in Greek poetry, though there an anacrusis usually occurs (as in the last of the three Greek passages just quoted).

poetry left to us by the genius of Greece, but he would feel to some extent that 'her wreaths renewed their flowers.'

Further instruction in the elements of metre would fall under the following heads:

(a) Kinds of feet and kinds of metre should be classified on the principles laid down by the Greeks themselves: feet being distinguished as *ισοι*, *διπλάσιοι* or *γριούλοι* (the last might be ignored, unless a play was being read in which Cretic measures did occur), and metres as *μονοειδῆ*, *ἐπισύνθετα* or *μικτά*, terms which are not nearly so formidable as they look, and much more simple and scientific in principle than those at present current in English editions of the Greek poets. *μονοειδές*, *ἐπισύνθετον* and *μικτόν* are nothing but the three logically possible ways in which feet can be arranged: either the foot is the same throughout (as in hexameters and senarii, the apparent 'spondees' in the former being regarded as contracted dactyls, and the apparent spondees in the latter as slightly heavier trochees, — >); or a group of feet all alike (internally homogeneous) is set down beside another group of different feet, this latter also being internally homogeneous:—

˘ ˘ ˘ - > - ˘ ˘ ˘
nivesque deducunt Iovein.

- ˘ ˘ - ˘ ˘ ˘
nunc mare nunc siluae :

or feet of different forms, such as dactyl and trochee, occur in one and the same group or κῶλον.

- > - ˘ ˘ ˘ ˘
Dianae sumus in fide.

The treatment of the subject should be historical, the elegiac couplet being pointed to as an early and elementary strope (*μέτρον μονοειδές*, dactylic throughout), while Archilochus is referred to in connection with *ἐπισύνθετα*. In no case should a poet be named without the exhibition and analysis of a few lines of his work. The teacher or lecturer on metre must produce selected specimens, just as a lecturer on botany would produce simple plants or parts of plants.

A sixth-form boy who understood the meaning of *ἐπισύνθετον* and knew the constantly recurring groups, ˘ ˘ ˘ - ˘ and - ˘ - ˘, would very soon be able to analyze and read metrically about half of the extant odes of Pindar. I do not mean that he should actually do this. He might read one or two great odes, such as the fourth Pythian. The simplest notation for the

metre is to set down Δ or δ for ˘ ˘ ˘ - ˘ and ε for - ˘ - ˘ (ε being the initial letter of the traditional term *ἐπίτριτος*). Thus the first strope, *σάμερον μὲν χρόν σε παρ' ἀνδρὶ φίλῳ κ.τ.λ.* is so described:—ε Δ ε Δ ε Δ ε Δ ε ε Δ (4) ε Δ ε ε ε ε Δ (4) ε ε ε ε ε ε ε. The symmetry which this reveals to the eye is practically all that is known, with anything like certainty, about the structure of a strope in this kind of metre. (Δ4 means a κῶλον of four, not, as usual, of three, dactyls. Catalexis could be indicated by Δ-, ε-).

(b) It would be necessary to say something about the equalization of bars, a subject on which a great deal has been said and written. But it is of no practical importance to the literary student whether a dactyl in *μικτά* was  (Apel, followed by Schmidt) or  (improbable, because not trochaic in effect, but rather *ισοι*, 2 : 1 : 1) or  (Westphal, rather difficult, I should imagine, in execution). All that he need know is that the dactyl must have been somehow made equivalent to the trochee: must have been lighter and faster than the normal dactyl. *δικτυλος τρίσημος* will be the most convenient name for it.

As for *ἐπισύνθετα*, unless there was a change of time, $\frac{3}{8}$ to $\frac{2}{4}$ or $\frac{2}{4}$ to $\frac{3}{8}$, between the κῶλα, the dactyls must have been assimilated to the trochees or the trochees to the dactyls. Professors Jebb and Gildersleeve follow Schmidt implicitly, and insist that the latter was the case, construing the trochee ˘ - (i.e. making it a foot in *λόγος τριπλάσιος*). This seems to rest ultimately on the idea that 'Doric' or 'dactylo-trochaic' measures, or whatever they are called—that is, *ἐπισύνθετα*—were graver and more impressive, *σεμνότερα*, than were *μικτά*. No doubt they were, but the different principle of construction may, for all we know, have accounted for that sufficiently: groups of some length being here homogeneous, whereas in *μικτά* there is frequent change in the form of the foot. It is an indication of trochaic time that ˘ ˘ ˘ and ˘ ˘ ˘ - ˘ - ˘ not unfrequently occur as variations upon the normal ˘ ˘ ˘ and ˘ ˘ ˘ - ˘ - ˘: ¹ and

¹ Schmidt's analyses of Sophoclean odes are full of illusions in regard to *ἐπισύνθετα* and *μικτά*. Thus *O.T.* 1086 f. *ἐπερ ἐγώ μάρτις εἰμὶ καὶ κατὸ γνώμαν ἕρπις κ.τ.λ.* is construed as 'logaedic.' The argument seems to be this: probably a *ὑπόρχημα*, that is, a more lively lyric than the usual *στάσιμα*: therefore *μικτόν* in composition. Conversely, *O.C.* 1044, *εἰην οὐδὲ δαῖσιν κ.τ.λ.* is construed as 'dactylic,' in $\frac{2}{4}$ time, when it is as plainly

that the trochee is sometimes resolved . . . (e.g. in the last line of the strophe in *Pyth.* IV.).

(c) 'Periodometry' — the separation of subordinate groups of κῶλα within a strophe — is at first sight a thorny, recondite, and unpractical subject. I propose to state very briefly one or two principles which seem to place it upon a firmer basis, theoretically: and this having been done, it will appear that a part of the study might with advantage be taught, perhaps even in schools.

The key to the arrangement of περίοδοι lies, in a great many cases, in careful examination of the κῶλον or cadence with which a strophe closes. The point at which a strophe ends is known with certainty, and if we find certain types of verse occurring with great frequency in this place, there is a presumption that these types were felt to be appropriate and effective at the close of any group, whether a strophe or a shorter whole. But certain forms do constantly recur in this place. . . . is one (τὰν δυσάλωτον ἔλη τις ἀρχάν, virginibus puerisque canto). . . . is another (πατρῷον δέ ἐκτίνει τις ἀθλον). . . . is a third (καὶ δόξαντ' ἀποκλῖναι). The first step in an inductive enquiry will therefore be to take various strophae, and, observing the cadence into which they close, to look for that cadence in them elsewhere. If we find it two or three times in the course of

logaeodic as any one ever was. There is not even the justification of appropriateness in θεος, for the song expresses lively excitement and curiosity. Some lines, it is true, in the middle of the strophe, approximate in form to ἐπισύνθετα, but at most this would lead us to classify the whole as partly logaeodic, partly ἐπισύνθετον. A change of time being assumed to be unlikely in a strophe, Schmidt's belief that ἐπισύνθετα must be in 3 time prevents him from recognizing any such fusion of forms or hybrid strophae. (See Prof. Jebb's 'Metrical Analyses,' Intr. to *O.T.* p. lxxxv., *O.C.* lxxii.)

Trach. 496 f. μέγα τι σθένος ἡ Κύπρις is taken by Schmidt to be logaeodic (v. Prof. Jebb's Introduction, p. lix.), but it is quite clearly ἐπισύνθετον. It runs thus:—

μέγα τι σθένος ἡ Κύπρις ἐκφέρεται νίκας ἀεὶ^Λ
καὶ τὰ μὲν θέων
παρέβαν καὶ ὅπες Κρονίδαν ἀπάτασεν οὐ λέγω^Λ
οὐδὲ τὸν ἔννυχον Αἰδαν
ἢ Ποσειδάνων τινάκτορα γαῖας, &c.

Kroníδαν ἀπάτασεν οὐ λέγω does, it is true, look like logaeodic verse. But the illusion does not last when one remembers that in Pindar the last foot of the dactylic κῶλον in ἐπισύνθετα is quite frequently a trochee. These lines run Δ(4) ε ε Δ(4) ε Δ ε Δ, &c.

the strophe, we may assume provisionally that περίοδοι ended at these points, and proceed to look about for further evidence. To a certain extent, the first line of a strophe as well as the last has a character of its own, that is, has recurrent forms which seem to have been preferred. If the lines which follow the closing cadences show any such characteristics, the division of the strophe at these points will be confirmed.

But there is also a non-metrical criterion. Grammar or syntax helps a little. In Greek poetry the sense is often independent of strophic limits—a sentence is carried over the iunctura of two strophae. There is much of this in Pindar, and a little of it in the lyrics of tragedy. Now where it does occur there is a distinct tendency to make the transition by means of a relative pronoun. For example, in *O.T.* 1195, the antistrophe begins 'οστις καθ' ὑπερβολάν' κ.τ.λ.: *Bacchae*, 87, 'ὸν ποτ' ἔχον' ἐν ὕδαινων λοχίαις ἀνάγκαις' κ.τ.λ. This then, we are tempted to think, was felt to be a neat and happy connecting link, just as in Latin prose the relative was frequently adopted for attaching a period to its predecessor. Thus there is a presumption that it will be found rather frequently at the beginning of a new περίοδος, within the strophe. Premising that, syntactically, the participial clause is very like a relative clause in effect, we now proceed to examine a choric passage on these principles, looking for (a) a closing cadence, (b) occurrence of either relative pronoun or participle at the beginning of a περίοδος. Take *O.T.* 1186:—

ἴω γενεαὶ βροτῶν,
ὅς ὑμᾶς ἵστα καὶ τὸ μη-
δὲν ζώσας ἐναριθμῶ.
τίς γάρ, τίς ἀνὴρ πλέον
τᾶς εἰδαμονίας φέρει
ἢ τοσοῦτον ὅσον δοκεῖν
καὶ δόξαντ' ἀποκλῖναι;
τὸν σὸν τοι παράδειγμ' ἔχων,
τὸν σὸν δάίμονα, τὸν σὸν, ὡ
τλάμων Οἰδίποδα, βροτῶν
οὐδὲν μακαρίζω.

ant. 1195 οστις καθ' ὑπερβολὰν
τοξεύσας ἐκράτησε τοῦ
πάντ' εὐδαίμονος ὄλβου,
ὦ Ζεῦ, κατὰ μὲν φθίσας
τὰν γαμψώνχα παρθένον
χρησμῷδόν, θανάτων δὲ ἐμά
χόρα πύργος ἀνέστα,
ἔξ οὐν καὶ βασιλεὺς καλεῖ
ἐμὸς καὶ τὰ μέγαστ' ἐπι-
μάθης ταῖς μεγάλαισιν ἐν
Θήβαισιν ἀνάστων.

Eur. *Ion*, 452 f., is a system which yields satisfactory results, when it is analyzed by the help of these criteria. The *περίσσοι* consist of *κῶλα* of the following length: 3, 4, 2, 4, 3, 4. The last 4 *κῶλα* are to be regarded as a short *πνίγος*, which serves as a sort of larger clausula to the whole system. Thus there is a perfect symmetry:—



Many other lyrics in tragedy fall into equally intelligible and effective groups: and if it were to appear that there are many which do not yield results so obvious, the validity of the method would not be disproved. It is not necessary to suppose that, unless the principle of composition was a hard and fast rule from which no poet might depart in any piece, it cannot have existed at all. In some cases the ends of groups may have been marked by musical effects only, effects which it is now impossible to recover. At all events, if the criteria proposed do fail us, we cannot with much confidence expect to be enlightened by a method which divides *O. T.* 1186 f. in the ratio 4 : 4 : 3.

But the prosecution of this subject in detail is of little interest for the ordinary student of Greek literature, who merely wishes to read Greek poetry with intelligent appreciation, not to study it as a professional scholar: for him it is enough to master the

outlines of metrical theory, and to become familiar in practice with the more obvious and simple metrical forms, and the places where they occur—such as the three frequently recurring clausulae specified above. The teaching of these elements would not be difficult or laborious if it were consistently pursued from the first, and made to invariably accompany all reading of Greek lyrics in schools. It is when it comes late that it seems formidable and repellent—when habits of unmetered and meaningless pronunciation have been formed, and when much lee-way has to be made up, ground having to be covered rapidly because it had been neglected before. It may be objected that schoolboys have no spare energy or spare power of memory for an extra subject like this. But is it so certain that any such burden would be imposed? At all events there would be a decided gain to set against it—that poetry read would be remembered much more easily: a great deal would fix itself in the careful reader's memory, without any special effort at all. Further, some little saving could probably be effected with advantage in other directions. The old technical terminology for the lyric metres of Catullus and Horace might to a large extent be dispensed with. The metres of these poets would become more intelligible if simply brought into connection with some elementary Greek types. This brings us back to a point already insisted upon—the importance of historical order in dealing with the various forms of a measure. How, for example, is the metre of Catullus' *Atys* to be explained by itself? We must go back to Greek prototypes. And here, as always, the teacher would have to distinguish what it was necessary to know for the literary student, and what has only a special and theoretical interest. In this case, he would explain the nature of 'Ionic' verse—a measure which, with the dochmius, it would probably be well to treat apart from the three classes of metre above defined, explaining that its exact musical structure is not known with any degree of certainty. He would explain, then, that the essential feature of it was a strong stress on the third of four syllables (that is, supposing him to be dealing with Ionic *a minori*, the form most common in extant literature), and he would point to Anacreon's lyrics—

φέρ' ὑδωρ, φέρ' οἶνον ὡς παι

with the measure through Anacreon's visit to the court of Pisistratus,

μεταμανθάνοντα δ' ὑμνον
ορ
νοτίοις ἔτεγχε παγαῖς,

connecting with this, in the next place, the normal Ionic which Anacreon has as a 'clausula'—

ἄγε δητέ μηκέθ' οὔτω
πατάγω τε κάλαληθ
Σκυθικὴν πόσιν παρ' οἴνῳ
μελετῶμεν, ἀλλὰ καλοῖς
ὑποπίνοντες ἐν ὑμνοῖς

and which in the *Persae* is continuous—

πεπέρακεν μὲν ὁ περσέπτολις ἥδη κ.τ.λ.,
and finally pointing out, with the help of the surviving Greek line

Γαλλαὶ μητρὸς ὀρέης φιλόθυρσοι δρομάδες,
that what Catullus has is a combination of the broken and the normal Ionic—

super alta vectus Atys celeri rate maria.¹

This is only one example out of many. Most lyric measures could be treated in the same way, and the real effect of Catullus' or Horace's forms would be much better understood by contrast with what had preceded them in Greece—how, for instance, Horace imparted Roman 'gravitas' to the Alcaic stanza by two changes, making the spondee or heavy trochee regular in the

¹ For the *ἥθος* of the measure, it is in its general effect a trochaic dipody unhinged or thrown out of balance by a strong stress on one half of it: therefore adapted to express mental disturbance: and hence constantly associated with the ecstatic worship of Cybele and Dionysus—being, for example, the metre of most of the lyrics in the *Bacchae*.

second place (— : — — —)—a form perhaps suggested by the Pindaric 'epitritus'—and having 'diaeresis' in the middle of the verse where Alcaeus had none,

χειμῶνι μοχθεῦντες μεγάλῳ μάλα,

this effect being somewhat akin to the juxtaposition of two κῶλα in the elegiac 'pentameter'; while in Sapphic verse he introduced an effect akin to the hexametric linking of two groups by 'caesura' (... 'nivis atque dirae,' a word beginning in the middle of the dactyl, — — — → — — — — —).

All these are very familiar facts, of which, as facts, no scholar or teacher requires to be reminded. What it is perhaps not altogether superfluous to insist upon, is the selection or discrimination of those facts which might be taught easily and with advantage. Perhaps it is sanguine to expect that a new impulse would be given to the study of Greek poetry, and a new attraction added to it. But the experiment might at least be tried.

At present metrical matters are often spoken of as a very recondite and special study, more so even than palaeography. It is difficult to see any justification for this. Palaeography may be taken on trust by the ordinary student. For the constitution of the text, he may, reasonably and without material loss, rely upon some editor who is known to be sound and careful. But he cannot read a line of poetry with any approximation to the effect originally intended by the poet unless he knows something of metre. True, the most advanced metricalian probably falls short of being able to reproduce or reconstruct the exact scheme which Aeschylus or Pindar intended. But it is at least certain that Greek lyrics were not pronounced as if they were English prose.

W. R. HARDIE.

NOTES ON EARLY ATHENIAN HISTORY.

I.—THE COUNCIL: ἑφέται AND ναύκρατοι.

ALL students of Greek history are aware that much ingenuity has been expended on attempts to reconstruct the pre-Solonian constitution of Athens. One of the most important points debated has been the question what was the nature of the Council which undoubtedly always existed, and what

were its relations to the later Council of the Areopagus. Several elaborate theories as to this have been constructed: the most brilliant and most popular is that of Lange: it has been adopted wholly or in part by nearly all later writers.

He maintains¹ that the ἑφέται mentioned

¹ *Abh. d. k. Sachs. Gesellschaft a. Wissenschaften*
17. Leipzig, 1879.

in the laws of Draco were members of the Council of the Areopagus; the number fifty-one he explains by the supposition that the Council consisted of sixty members: nine of them were the nine Archons, the remainder were called *éphérai*. The Archons were selected from the members of the Council; the members of the Council were divided equally among the four Ionic tribes. The name *éphérys* he derives from *épi* and *érys*. This hypothesis he supports by analogy with the Spartan *gérōvōria* which consisted of twenty-eight *gérōvōtes* and two *βασιλέis*.

I do not wish to criticise this theory at length: I will in this place content myself with pointing out that there is no authority at all for the statement that the nine Archons were elected from members of the Council; this however is essential to the whole. The analogy with Sparta is a very unsafe one, the two states are in every way unlike one another. The derivation of the word *éphérys* is at the best very doubtful.

Besides the Council of sixty Lange supposes that there was also a Council of 300, chosen seventy-five from each tribe and twenty-five from each Phratry. This is the body of 300 which tried the murderers of the Cylonians and was set in power by Cleomenes.

Lange is followed by Phillipi¹; Gilbert and Busolt accept his exposition with more or less reserve. His theory has very nearly driven out of the field that of Wecklein: he maintains² that before Solon there was a place of judgment on the Areopagus but no Council of the Areopagites. The *éphérai* in the early times judged in all the courts, but had no duties as a Council. The king however was helped and advised in the government by the *τανκράποι* who formed a kind of Council.

Others have attempted to show that the fifty-one *éphérai* were really identical with the *τανκράποι*; there were added to the forty-eight *τανκράποι* three *έξηγγῆται*.

I propose now to examine the grounds for the two theories by which it is maintained that the old Council at Athens was identical with (a) the *éphérai*, (b) the *τανκράποι*. If, as I hope, I can show that there is really no evidence for either, I shall then in a later paper discuss what positive evidence we have as to the constitution of the Council.

a. *éphérai*.

In both theories there is one common characteristic. They are an attempt to re-

construct the constitution for a period concerning which there is really hardly any evidence. Hence, though they cannot be proved, it is nearly as difficult to disprove them. We know so little about Athens before Solon that there is scarcely any arrangement of which we can positively say it could not have existed. All I can attempt to do is to show that there is no evidence; that both hypotheses are so evidently without support that they may safely be disregarded. In order to do so I must begin by calling attention to the nature of our authorities. All criticisms must start from the fact that so far as we know there existed in antiquity no contemporary written record of any event at Athens before the time of Solon.³ All statements of our authorities are eventually derived from the laws and poems of Solon. In the former were incorporated some of the laws of Draco. Some of these laws were still in use (altered and revised) in the fourth century. I shall now attempt to show that all statements with regard to the *éphérai* are based eventually on these laws. If this can be done, it will follow that, as the *éphérai* are only known from legal and judicial documents, we have no evidence at all and can have none for giving them any constitutional position outside the law-courts.

I will now quote the authorities, which may be grouped in three divisions: (1) a law of Draco incorporated in the laws of Solon, (2) a single clause in one of Solon's laws, (3) procedure in the law-courts of the fourth century.

1. *C.I.A.* i. 61, part of the revision of the laws in 409 B.C. Omitting the introductory formulae the decree runs: *τὸν Δράκοντος νόμον τὸν περὶ τοῦ φόνου ἀναγράφειν οἱ ἀναγράφειν τὸν νόμον παραλαβόντες παρὰ τοῦ [κατὰ πράταν] γραμματέων τῆς Βουλῆς ἐστήλη λιθίνη καὶ καταβέντων πρόσθεν τῆς στοῦν τῆς βασιλείας. οἱ δὲ πωληταὶ ἀπομοσθαστών κατὰ τὸν νόμον. οἱ δὲ Ἐλληνοταραπαι δόντων τὸ ἄργυρον.*

πρῶτος ὄχων. καὶ ἐάν μὲν κ' προνοιας κτείνη τὶς τις, φένειν. δικάζειν δὲ τοὺς βασιλέας αἰτιῶν φόνον η [έαν τις αἰτιᾶται τὸν Βουλεύσαντα· τοὺς δὲ ἑφέτας διαγνώναι.

The rest of the inscription is mutilated. Sufficient however remains to show that one of the laws of Demosthenes in *Macartatum* 57 is a copy of it. The law runs:—

ἐάν δὲ αἰδέσασθαι δέη, ἐάν μὲν πατήρ γέ ή ἀδελφός γέ ή νεῖς, πάτητας ή τὸν κωλιούστα κρατεῖν..... ἐάν δὲ τούτων μηδεὶς γέ, κτείνη δέ ἄκων, γνώσι δέ οι πεντήκοντα καὶ εἰς [ῃ] οἱ ἑφέται ἀκούται κτείναι, ἐστόσθων δέκα οἱ φράτερες ἐάν θελόντι τούτους δέ οι πεντήκοντα καὶ εἰς αἰρέσθων. καὶ οἱ πρότεροι κτείναντες ἐν τῷδε τῷ θεομῷ ἐνεχθέσθων.

The following law in Dem. in *Aristocratem* 37

³ I do not refer in this statement to the *ἀναγραφὴ* of the Archons.

¹ *Der Areopag und die Epheten.* Berlin. 1874.

² *Sitzungsberichte d. k. Bayer. Gesell. d. Wissenschaften.* III. Munich. 1873.

seems to be copied from the same θεσμός of Draco: έὰν δέ τις τὸν ἀνδροφόνον κτείνῃ η ἀλτίος η φόνος, ἀπεχόμενον ἀγορᾶς ἐφορίας καὶ ἀθλῶν καὶ λεπάνω Ἀμφικτυνοικῶν, ἀπερ τὸν Ἀθηναῖον κτείναται, ἐν τοῖς αὐτοῖς ἐνέχεσθαι· διαγγράσκειν δε τοῖς ἑφέταις.

A good deal of the law still remains indecipherable. As to the text; after κρατεῖν in L. 2 there are some words in the inscription omitted in the Demosthenes quotation. In L. 4 η οἱ ἑφέται; it has been pointed out that the η is probably a false copy of the text. The transcriber did not understand the HOI which he read η οἱ instead of οἱ. This cannot be now read on the stone. L. 4 ἐσέσθων δέκα. Demosthenes reads αἰδεσθῶν δέ. L. 5 τοῦτος δέκα. The MS. reads τούτοις, the stone is here of no use, the restoration τοῦτον is adopted by most scholars.

Pollux. viii. 125 has

ἐφέται τὸν μὲν ἀριθμὸν εἰς καὶ πεντήκοντα, Δράκων δ' αὐτοὺς κατέστησε ἀριστίνδην αἰρεθέντας. It has been suggested that this notice is taken indirectly from this law, which Pollux has interpreted as did the transcribers as though the ἀριστίνδην αἰρεθέντας refers to the ἑφέται.

2. Next in importance are two quotations from Solon.

Plutarch, Solon 19.

ἀτίμων ὅσοι ἄτιμοι ἥσαν, τρινή η Σόλων ἄρξαι, ἐπιτίμων εἶναι πλὴν ὅσοι εἰς Ἀρέιου πάγου η ὅσιες τῶν ἑφετῶν η ἐπὶ πρυτανείον καταδικασθέντες ὑπὸ τῶν βασιλέων ἐπὶ φόνῳ η σφαγαῖσιν η ἐπὶ τυραννίδηι ἐφευγον θετε διθεμός ἑφάντης δέ.

Andocides, de Mysteriis 78: a passage in the decree of Patroclides is obviously founded on this.

πλὴν ὑπόσα δὲ στήλαις γέγραπται τῶν μη ἐνθάδε μειωτάντων, η ἐξ Ἀρέιου πάγου η τῶν ἑφετῶν η ἐπὶ πρυτανείον η Δελφίνων ἐδικάσθη η ὑπὸ τῶν βασιλέων, η ἐπὶ φόνῳ τις ἐστι φυγή, η θάνατος κατεγνώσθη, η σφαγεύσιν η τυράννους.

It is probable that neither version gives the exact text of the law; in Andocides it is very probable, as Wecklein suggests, that the η before ὑπὸ τῶν βασιλέων and perhaps before ἐπὶ φόνῳ are due to careless reading of the stone, as in the inscription before quoted.

Though the text is not quite certain we have these two fragments of the laws of Solon referring to the ἑφέται; one of these is taken from the laws of Draco.

3. Besides these there are a number of passages in ancient authors describing more or less fully the five courts for bloodshed which had continued to exist from the time of Draco. Of these the most important are Dem. in Aristocr. 24 etc., 65 etc. and Aristotle 'Αθ. πολ. 57. Both describe these courts as they were in the fourth century; both are founded on the contemporary laws, and to a great extent consist of quotations from them. These laws are the laws of Draco as preserved and modified by Solon, and again revised in 409 and perhaps later.

In Demosthenes the ἑφέται are spoken of as still judging in certain of their courts. They were probably also mentioned in Aristotle, but an unfortunate lacuna leaves this doubtful.

Almost all other accounts of the ἑφέται in the lexicographers etc. are from one of these sources; they are based either on the laws of Solon, or the accounts in Aristotle and Demosthenes of the procedure in the 4th century. The following are the most important passages:

Harpocration s.v. ἑφέται. οἱ δικάζοντες τὰς ἑφέταις κρίσεις ἐπὶ παλλαδίῳ καὶ ἐπὶ πρυτανείῳ καὶ ἐπὶ Δελφίνῳ καὶ ἐν Φρεαττῷ ἑφέται ἐκαλούντο. and again:—

ἐπὶ παλλαδίῳ. Δημοσθένης ἐν τῷ κατὰ Ἀριστοκρά-

τοῦ. δικαστήριον ἔστιν οὕτω καλούμενον ὡς καὶ Ἀριστοτέλης ἐν Ἀθηναῖον πολιτείᾳ, ἐν δὲ δικάζουσιν ἀκούσιον φόνου καὶ βουλεύσεως οἱ ἑφέται.

He adds an account of the origin of the court, which he attributes to the robbery of the Palladium from Agamemnon by Demophon on the return from Troy. Fifty Athenians and fifty Argives were judges. οἱς ἑφέταις ἐκάλεσαν παρὰ τὸ πάρ αὐτοφοτέρων ἐφεῦγαι αὐτοῖς τὰ τῆς κρίσεως. This, as we learn from Eustathius, comes from Kleidemus.

Pollux 177 etc. describes the Athenian δικαστήρια, then says:—

ἐφέται τὸν μὲν ἀριθμὸν εἰς καὶ πεντήκοντα. Δράκων δ' αὐτοὺς κατέστησεν ἀριστίνδην αἰρεθέντας. ἐδίκασον δὲ τοῖς ἑφέταις προκατέστησε τὴν εἰς Ἀρέιον πάγον δικαστήριον. Σόλων δ' αὐτοὺς προκατέστησε τὴν εἰς Ἀρέιον πάγον δικαστήριον. δοκοῦσι δ' ὡνομάσθαι ὅτι πρότερον τοῦ βασιλέως τοῖς ἑπτὸν ἀκούσιον φόνῳ κρινομένοις ἐξετάζοντος δ' Δράκων τοῖς ἑφέταις παρέδωκε τὴν κρίσιν, ἐφέσιμον ἀπὸ τοῦ βασιλέως πεντογικός.

The first part of this seems to be from Draco's law.

Photius and Suidas have:—

ἐφέται. ἄνδρες οἵτινες πεντιώντες ἐδίκαζον. ἑφέται δὲ ἐκλήθησαν προτούσι τὴν εἰς ἀματι εδίκασον οἵτι οὔτι ἑφεσι παρ' αὐτοῖς οὐ δύναται εἰς ἄλλο δικαστήριον γίγνεσθαι πουτέστην ἐκκλητος.

and also:—

ἄνδρες ὑπὲρ ν' ἔτη γεγονότες καὶ δριστα βεβιωκέναι ποτάληψιν ἔχοντες οἱ καὶ τὰς φονικὰς δίκαιας ἐδίκαζον.

The statement of age is new. Δριστα βεβιωκέναι ποτάληψιν ἔχοντες is a paraphrase of the ἀριστίνδην αἰρεθέντες of Pollux.

Timaeus. Lex. Platonicum.

ἐφέται. πεντήκοντα εἰσιν οὕτως οἱ ἀπὸ Δράκοντος περ φόνου δικάζοντες κριταί.

The only passages in fact which appear to be due to any other source, are the following:

Frug. Hist. Graecorum. I. p. 394 from S. Maxemus:

ἐκ γὰρ τῶν ἐννέα καθισταμένων ἀρχόντων Ἀθήνησι τοῦς Ἀρεοπαγίτας οἵδει συνιστάναι δικαστάς, ὡς φησιν Ἀνδροπότιον ἐν δευτέρᾳ τῶν Ἀτθίδων. οὔτερον δὲ πλειστῶν γέγονεν η ἐξ Ἀρέιου πάγου βουλή τουτέστιν ἐξ ἀδρῶν περιφανεστάτων πεντήκοντα καὶ ἑπτὸν τοῦς Ἀρεοπαγίτας οἵδει συνιστάναι δικαστάς, οὔτερον δὲ πλειστῶν γέγονεν η ἐξ Ἀρέιου πάγου βουλή, ἐκ τῶν ἐννέα καθισταμένην ἀρχόντων.

The passages are confused and inconsistent; we get however a clear distinction between Ἀρεοπαγίται δικαστάς and η ἐξ Ἀρέιου πάγου βουλή. The δικαστάς would be the πεντήκοντα καὶ εἰς. The only part of the statement which is new is that the δικαστάς were taken ἐκ τῶν ἐννέα καθισταμένων ἀρχόντων. It is at least very probable that this is a mistake of the transcriber and that the whole clause ran ἐκ ἀνδρῶν περιφανεστάτων πεντήκοντα καὶ ἑπτὸν τοῦς Ἀρεοπαγίτας οἵδει συνιστάναι δικαστάς, οὔτερον δὲ πλειστῶν γέγονεν η ἐξ Ἀρέιου πάγου βουλή, ἐκ τῶν ἐννέα καθισταμένην ἀρχόντων.

I do not wish however to press this: there is nothing in itself improbable that the jurors—the ἑφέται—should be chosen from among those who had been Archons. The passage may be taken to prove that the ἑφέται were drawn from the same class as the βουλή afterwards: it does not show that the ἑφέται as a body were identical with the βουλή.

It is clear then that with this one doubtful exception all accounts of the ἑφέται can be traced back to these laws. The statements are on the whole simple and consistent.

What we learn from them is that in the time of Draco the verdict in certain cases was given not by the Archons but by a body of fifty-one ἔφέται; the βασιλεύς presided in the court and introduced the case, the ἔφέται gave the decision. Solon decided that in cases of wilful murder the members of the Council of the Areopagus should take the place of the ἔφέται; for other cases of bloodshed the name of ἔφέται was preserved to later times. Besides this nothing else whatever was known or is known about them. The statement is found in some writers that they were introduced by Draco; this is not an authentic statement, it is only a hasty deduction from the fact that Draco in his laws regulates their procedure.

If however instead of going outside the evidence we examine it, we find that it tells us a good deal. The evidence is entirely legal: it comes entirely from codes of law: it is occupied simply with judicial procedure. Draco decreed that certain suits should be decided by fifty-one ἔφέται; these held exactly the same position as the δικασταί in later times. The βασιλεύς presided, the ἔφέται found the verdict. The ἔφέται do not appear as an independent corporation with judicial power, but as assistants to the magistrate: they are jurors. Why should we suppose that they ever were anything more than this? There is no evidence of any kind, except an improbable etymology, for supposing that the ἔφέται had any existence outside the court of the βασιλεύς. Draco, as we know, codified the law, he wrote out the rules of procedure. Among these one was that in cases of bloodshed a man should be tried by a jury of fifty-one; the jurors were called ἔφέται. In later times they were called δικασταί. Substitute for the word ἔφέται the word δικασταί and in every place where it occurs the latter word will be equally appropriate. The whole attempt to make of the ἔφέται a council or board has no support. It is of course possible that the ἔφέται were chosen from among members of the Areopagus; it is indeed probable that they were: but even if this was the case it would be as gratuitous to identify the fifty-one ἔφέται with the Council, as it would be to identify the *recuperatores* at Rome (who were Senators) with the Senate.

Lange's theory arises from an attempt to explain the number fifty-one. As he justly says, 'it has no connection with any of the known divisions of the Athenian people in the pre-Solonian period.' It is however important to remember that it is very similar to the numbers of the δικασταί at

Athens in later times. If we find fifty-one ἔφέται and later 201 δικασταί we cannot separate the two numbers: the fifty-one ἔφέται must have been the model of the 201, 501, 1001, δικασταί. The question is: Are we to explain the number fifty-one on the same principle as the later 201? Is it simply chosen arbitrarily as the nearest odd number to some round number, or is there some special historical cause for it? A positive answer cannot yet be given.

As to the class from whom the ἔφέται were chosen, we have the doubtful authority of Androtion for the statement that the δικασταί οἱ Ἀρεοπαγῖται, i.e. οἱ ἔφέται, were chosen from those who were Archons. If this is true, and we are not justified in rejecting it, then it follows that whenever a murder case had to be tried the βασιλεύς had to form a court of fifty-one from among the ex-Archons, just as at Rome the Praetor has to select *judices* from the Senators. The jurors were in this case also probably members of the Council; it is necessary however again to insist on the fact that this is quite a different thing from any judicial activity of the Council itself; nor does it imply that the ἔφέται formed a council, or had any corporate existence outside the law-court. Solon made an important change in allowing all citizens to sit in a δικαστήριον. From this time the name is changed; the word ἔφέται is only used of the old established courts, even in one of them, that ἐν Ἀρείῳ Πάγῳ, the council as a whole henceforth took the place of the fifty-one who had before sat as jurors. How the ἔφέται were appointed for the other courts of bloodshed we do not know; from Ar. Αθ. Πολ. 57 it is extremely probable that the ἔφέται were chosen as were the other δικασταί by lot. If the reading οἱ λαχόντες [ἔφέται] be right, it would be sufficient to show that there was no essential difference between a δικαστής and an ἔφέτης; the juror in one court was called by one name and in another by another.

We may if this view be correct absolutely put aside all thought of the ἔφέται in dealing with the Athenian Constitution; they belong purely to legal history. This is the reason why they are not mentioned in the Αθηναϊών Πολιτεία. As the first instance in history of trial by jury they are of the greatest interest; it is a mistake to obscure this by attributing to them other functions. The account given by our authorities is simple and intelligible; there is no reason for supplanting them by any elaborate theory for which there can be no evidence.

β. ναύκρατοι.

We may then reject the identification of the *έφέται* with the old Council at Athens; we must now consider Wecklein's theory that the *ναύκρατοι* formed a sort of council to the King and Archons. As is well known, the only support for it is a single passage in Herodotus.¹ Speaking of the conspiracy of Cylon the historian says: *τούτους ἀνταῦτοι μὲν οἱ πρυτάνεις τῶν ναυκράτων, οἱ περ ἔνεμον τότε τὰς Ἀθήνας.* This statement has naturally caused much difficulty; a few authors have based on it the theory of a council of *ναύκρατοι*; others have more wisely almost entirely disregarded it. It is not however satisfactory to have to put aside a deliberate statement of Herodotus, and there is, I think, a simple explanation of the expression.

We have besides the chapter of Herodotus an account of the conspiracy of Cylon by Thucydides.² He says nothing about the *ναύκρατοι* at all, but says: *τότε δὲ τὰ πολλὰ τῶν πολιτικῶν οἱ ἐνέα ἄρχοντες ἐπραστον.* This is generally supposed to be a deliberate correction of Herodotus. There is however in Thucydides an expression which explains how it is that the *ναύκρατοι* have got into the other account. Thucydides says that when the alarm was sounded the people *ἐβοήθησαν πανδημεῖ ἐκ τῶν ἀγρῶν*, i.e. all the villagers from Attica came to help against the tyrants. Now in the time before Cleisthenes the smallest local division of Attica was the *ναυκρατία*: it was a financial unit and apparently also a military unit. Each *ναυκρατία* had to supply two *ιππεῖς* and perhaps a ship; direct taxation when levied was levied according to *ναυκρατία*. Cleisthenes after-

wards substituted organisation by Demes for that by *ναυκρατία*. A *ναυκρατία* was then almost certainly a collection of men living in the same place, forming a unit for financial and military purposes. When then all the Athenians trooped into Athens they would come in their *ναυκρατία*; the members of each *ναυκρατία* would march in together and bivouac together and would be under the leadership of their *ναύκρατος*. This is the only way to explain how the *ναυκρατία* have got into the story at all; the coming in *πανδημεῖ ἐκ τῶν ἀγρῶν* is the same as coming in *κατὰ ναυκρατίας*.

It does not at all follow that Herodotus is right in saying that at this time *οἱ πρυτάνεις τῶν ναυκράτων ἔνεμον τὰς Ἀθάνας.* He may have made a mistake. It is however something to be able to show that his mistake naturally arises from the fact that at this crisis the *ναυκρατία* had an unusual importance. Whether the expression *πρυτάνεις τῶν ναυκράτων* is simply a mistake for *ναύκρατοι* and is identical with *ναύκρατοι*, or whether there really were some leaders chosen from among the *ναύκρατοι*, we have no means of determining; whatever is the truth as to this, in neither case is there any reason to suppose a permanent government of Athens by a council of *ναύκρατοι*: an organisation by *ναυκρατία* of the militia called out for a sudden emergency is all that is necessary.

We may then I think put aside all thought of *έφέται* or *ναύκρατοι* in attempting to paint a picture of the early Council which probably existed at Athens. I hope in another paper to be able to discuss what other evidence there is on the constitution of this Council.

J. W. HEADLAM.

¹ Her. v. 71.
² Thuc. i. 126.

EUR. MEDEA, 1056—1058.

μὴ δῆτα, θυμὲ, μὴ σύγ' ἐργάσῃ τάδε.
ἴασον αὐτοὺς, ὃ τάλαν' φέσαι τέκνω.
ἐκεὶ μεθ' ἡμῶν ζῶτες εὐφρανοῦσί σε.

THESE lines have been universally regarded as forming a portion of Medea's farewell to her infant sons. In them the mother is recognized as revolting for the second time from her plan to slay her innocent babes, and the whole passage, according to the ordinary rendering, might be analyzed thus: (1) Medea's resolve to murder her children (ll. 1019—1039); (2) change of resolve and determination to

spare them (1040—1048); (3) return to former purpose of slaying them (1049—1055); (4) second repentance and change of feeling (1056—58); (5) final return to original design (1059—to end of passage).

There is, no doubt, great beauty and truthfulness to nature in thus depicting the mother's double recoil from the slaughter of her children, but the passage in question as it stands presents great difficulties, and after a careful study of it I cannot but believe that this idea, however beautiful, of passion's double victory over that most obstinate of foes, a mother's love, never

belonged to Euripides, but that the lines in question (1056—58) were originally given to the chorus and read thus :

μὴ δῆτα θῦμα, μὴ σύγ' ἐργάση τόδε.
έσσον αὐτοῖς, ὃ τάλαντον φεύσαι τέκνων.
ἔπει μεθ' ἡμῶν ζῶντες εἰφρανοῦσί σε.

As will be observed, only three slight changes have been made, *θυμέ* into *θῦμα*, *τάδε* to *τόδε*, and *ἔκει* to *ἔπει*, and by these emendations the otherwise obscure line 1058 has been rendered completely intelligible. Medea has just fully and finally determined not to yield to her own timidity and tenderness of heart. She has bidden those present who were unworthy (or unwilling) to attend her sacrifice (*θύμα*) to keep away, when most naturally the chorus exclaims in answer to this direct address to themselves : 'Let there be no sacrifice, we pray thee ; do thou not do this thing. Let the boys live, O wretched one, and spare thy children, since living here with us (in *Corinth*) they will rejoice thy heart.' Medea then in accordance with her set resolve answers passionately : 'Nay, by the avenging powers below, I shall never leave my children here (in *Corinth*) to suffer insult at my enemies' hands. They must die.' In favour of my emendation, I may add :

(1) This interference on the part of the chorus conforms exactly with the *μὴ προβαίη* of line 907, the *μὴ τέκνα φονεύσης* of 855 and the *ἀτενέπτω τάδε* of 813.

(2) *θῦμα* well re-echoes the *θύμασιν* of line 1054, and *ἔστω* may be easily understood ; or we may regard it with *τόδε* as the object of *ἐργάση*, *ἐργάζομαι* being used like *ἔρδω* or *ρέζω* in the sense of 'performing' a sacrifice. I might even suggest *θῦε* in place of *θῦμα*.

(3) The earnest entreaty *μὴ δῆτα*, 'I pray thee,' and the expression *ὃ τάλαντον* are both better suited to the chorus than to Medea (cf. Il. 990 and 436). *τάλαντον* for *τάλαντα*, msc. for fem., is frequently found (cf. Ar. *Ran.* 559).

(4) *ἔκει*, in 1058, could only refer to Athens where Medea purposed going, but the three following lines show that Medea rejects the thought not of leaving them in Athens, but *Corinth*.

(5) The occurrence of *ἡμῶν* with *σε* in the same line, both referring to Medea herself is scarcely allowable. Medea in this whole speech of hers has spoken of herself in the singular number only.

I wonder indeed that the use of the pronouns alone in these lines has never before convinced any commentator of the propriety of transferring the three lines to the chorus. After all, do we lose much by making Medea renounce her resolve but once instead of twice ? Is not the double victory over her own inward repugnance and the remonstrance of the chorus even more powerful and more dramatic ?

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ON THE USE OF *προδανείζειν*.

IT is stated in the dictionaries that *προδανείζειν*, *προδανειστής*, *προδανεισμός* mean respectively 'to lend before or first,' 'a first lender,' 'a previous loan.' I shall endeavour to show that this meaning is sometimes excluded by the context and nowhere required.

I begin with the examples cited in the Paris edition of Stephanus, and in Liddell and Scott. They are (1) *Dio Cass.* 51. 17 *τοῖς τε προδανείσαι τι πάντα ἀπηλλάγη*, (2) Lucian *De Sacrif.* c. 3 ὁ Χρύσης.....*ἔπειδη ἀπράκτος ἀπέγει παρὰ τοῦ Ἀγαμέμνονος, ὃς ἀν καὶ προδανείσας τῷ Ἀπόλλωνι τὴν χάριν δικαιολογεῖται καὶ ἀπατεῖ τὴν ἀμοιβὴν καὶ μόνον οὐκ ὀνειδίζει* (L. and S. give this reference as illustrating the middle ; Jacobitz in his critical preface mentions no variant, and

προδανείσας is given in the Index verborum ac phrasium Luciani published by Reitz in 1746, the ultimate source of most of the quotations from Lucian in our dictionaries), (3) Plut. *Per.* c. 13 ἡ γὰρ ἐν τῷ ποιῶν εὐέρεα καὶ ταχύτης οὐκ ἐντίθησι βάρος ἐργῷ μονύμονον οὐδὲ καλλούς ἀκριβεαν ὃ δ' εἰς τὴν γένεσιν τῷ πόνῳ προδανεισθεῖς χρόνος ἐν τῇ σωτηρίᾳ τοῦ γενομένον τὴν ισχὺν ἀποδίδωσιν. I submit that in these three passages the notion of a 'previous loan' is otiose and inapt, I should even have said impossible, had not so many distinguished scholars acquiesced in this translation. But surely no one will tolerate a temporal reference of *πρό* in a fourth passage which L. and S. mention as 'Inscr. in Newton's *Halicarn.*' but do not quote. The inscription will be

found in the *History of Discoveries at Halicarnassus, Cnidus and Branchidae*, II. 2. p. 689. Sir C. Newton found it at Halicarnassus and treats it as a decree of the Halicarnassians: I do not know on what grounds M. Dareste (*Bull. de Corr. Hell.* iv. p. 341) assigns it to Cnidus. The passages pertinent to the enquiry are these: I. 3 *sqq.* ὅπως ἀν οἱ προδανεῖσαντες εἰς τὴν στοὰν ἦν ὁ δῆμος ἀνατίθησι τῷ Ἀπόλλονι καὶ βασιλεῖ Πτολεμαίῳ φανεροὶ ὥστε πάσιν, τοῖς ἔξεπαστοῖς ἐφ' ὃν ἀν συντελεσθῇ ἡ στοὰ, ὅσοι ἀν προδανεῖσαντο ἀπόκα μὴ θλασσον τὸ φ, ἀναγράψαι αὐτῶν τὰ ὄνοματα ἐν τῇ παραστάσι τῆς στοᾶς πατριστί, προσγράψαντας ὅτι οὐδὲ ζώκαν τῷ δήμῳ ἀπόκα χρήματα εἰς τὴν κατασκευὴν τῆς στοᾶς, I. 9 ὅπως δ' ἀν κορύσσωται οἱ προδανεῖσται, πόρους ὑποκεῖσθαι ἀπότοις κ.τ.λ. It should be added that the revenues which are to form the security are already mortgaged, so that the translation 'first lenders' is here singularly inappropriate. This inscription indicates the significance of the compound; *πρό* is 'forward' and *προδανεῖσιν* is 'to make an advance.' But this is not all: the word appears to have acquired the sense of 'lending without interest.' To prove this with absolute certainty is difficult, but the following passages appear to point to this conclusion. In the decree of Stratocles in honour of Lycurgus, *Ps.-Plut. Vit. x. Or.* 852 B we find πολλὰ δὲ τῶν ἰδιωτῶν δὰ πίστεως λαβὼν καὶ προδανείσας [καὶ] εἰς τοὺς τῆς πόλεως καιροὺς καὶ τοῦ δήμου τὰ πάντα ἔξακόντα καὶ πεντήκοντα τάλαντα. U. Köhler in *Hermes* i. (1866) p. 314 set beside this two fragments from an inscription found in 1864, which deals with Lycurgus' administration, προδεδανειμένα ἔξα... now *C.I.A. ii.* 162. c. 7, and .. λακτικὸν εἰς τὰ προδεδανειμένα, *ib.* c. 9, and concluded that Lycurgus had been able to borrow money for state purposes from private persons without security and probably without interest. The language of the Athenian decree as reported by Pseudo-Plutarch is not as appropriate as that of the decree of the Halicarnassians, since persons who trust their money so unreservedly to a minister of finance seem to have a better claim to the title *προδανεῖσται* than the official who converts it to the public service, and the example of Halicarnassus inspires some doubt about the absence of security. The absence of interest on the other hand appears essential and suits excellently the use of the word in 'Αθ. Πολ. c. 16 καὶ δὴ καὶ τοῖς ἀπόροις προεδάνεις χρήματα πρὸς τὰς ἔργασίας.

I take this opportunity of retracting my conjecture προσεδάνεις 'he

also lent money,' which rested on the belief that *προδανεῖσιν* meant 'lend beforehand' and was consequently unsatisfactory. The inscription *C.I.G.* 2717 b add. (= 2700 e) cited by L. and S. for *προδανεῖσται* probably recorded a loan on terms similar to those granted at Halicarnassus; note I. 7, *προσόδῳ* δημοσίων ὑποκειμένων, and there is not the least ground for assuming that the words in I. 11 προδανεῖσαις ἰδίων τῶν ιεροῦ.... must mean 'previous loans.' That this is not necessarily the force of the compound is indicated by the analogy of *πρόχρησις* and *προχρήσθαι*. See the examples collected by Kumanudis in his *Συναγωγὴ Λεξέων Ἀθηναϊστον*, e.g. *C.I.G.* 2927 σιτωνῆσαντα. καὶ προχρήσαντα ἐκ τῶν ἰδίων τὴν τεμῆν τὸν στίστον καὶ τὰς γενομένας μέχρις ἐνθάδε δαπάνας πάρας, and *Movr.* κ. βιβλ. εἴαγγ. Σχ. Σμύρνη 1878, p. 95 πολλάκις τῇ πόλει εἰς τὰς χρείας τῶν καιρῶν κεχαρισμένον καὶ προχρήσεις χρήσαντα, and compare Bekk. *An. Gr.* I. 472. 7 ἀφορμὴ ἰδίως παρὰ Ἀττικοῖς ἡ πάροδος (πρόσοδος ?) ἦν νῦν πολλοὶ πρόχρειαν καὶ ἐνθήκην λέγονταν.

There remains a sense of *προδανεῖσται* which may prove to have a different history. In the accounts of the *ἱεροποιοί* of Delos of the year when Demares was archon (180 B.C. according to M. Homolle, *Archives de l'Intendance sacrée à Délos*, p. 142) published in the *Bull. de Corr. Hell.* vi. 1882, there occur the words προχρησάμενοι p. 25, I. 208 and προδανεῖσταις *ib.* I. 209. M. Homolle, *ib.* p. 69, illustrates the latter word from two other Delian inscriptions, (1) the accounts of the *ἱεροποιοί* of the year of Charilas (269 B.C., *Archives* p. 126), I. 77—79 ἐδανείσαμεν μηδὸς Ἐκατομβαιῶν τῇ πόλει καὶ προδανεῖσταις (3 names) καὶ ἀναδόχους (3 names) Χ Χ κατὰ συγγραφὴν τὴν παρ' [Ἐπι]κύδει Κριτοβούλου κειμένην τῇ πόλει καὶ προδανεῖσταις (3 names) and (2) the accounts of the year of Sosisthenes (250 B.C., *Archives* p. 130) I. 120—121 ἐδανείσαμεν μηδὸς Ἀγραιῶν κατὰ ψήφισμα τῇ πόλει καὶ προδανεῖσταις [τοῖς βούλ]ευταῖς δραχμὰς Χ Χ Χ ἐπὶ ὑποθήκῃ τῶν προσόδους ταῖς δημοσίαις ἡ συγγραφὴ παρὰ..... Further (*Archives* p. 137) he recognises as Delian an inscription *C.I.G.* 2953 b attributed to Ephesus and corrects lines 11—12 thus: τοῦτο ἐδανεῖσ(a)μεν τῇ πόλει κ[ατ]ὰ [τ]ὸ ψήφισμα τοῦ δήμου καὶ προδανεῖσταις τοῖς β[ού]λ[ευ]τ[α]ῖς τοῖς ἐ[πὶ] Καλλί[ου]. In these three passages temple treasures are lent to the state and to *προδανεῖσται*. What then is the meaning here of *προδανεῖσται*? M. Homolle has answered this question in *Bull. de Corr. Hell.* vi. p. 69, and xiv. p.

439. I cannot do better than quote his words. 'L'État doit fournir des garanties et de double manière, par une hypothèque et par des cautions. Il engage les revenus publics et se fait représenter par des répondants ; ces répondants sont de deux sortes : d'abord les *προδανειστάι*, qui signent le contrat et s'engagent comme s'ils empruntaient eux-mêmes, ensuite les *άναδοχοι*, qui sont les cautions des *προδανειστάι*, et tiennent la place des *ἔγγυαι* dans les contrats passés avec les particuliers. Les prêts faits à l'État se distinguent de ceux qui se faisaient aux particuliers par leur courte durée : ce ne sont à proprement parler que des avances qui se règlent pour l'ordinaire dans le cours de l'exercice, ou d'une année sur l'autre.....Le remboursement est fait par les membres de conseil, comme aussi l'emprunt était contracté par eux, au nom de la ville ; les ressources qui y sont affectées proviennent des impôts publics donnés en gage' (*l.c.* xiv. p. 439 *sqq.*). Further, it is shown that there is no trace of interest. M. Homolle does not discuss the origin of this use of *προδανειστής*, nor does he state whether his interpretation is based simply on the passages which I have quoted or finds support from the terms of the numerous unpublished financial documents of the temple, but if this explanation be accepted—and independent criticism is hardly possible until the whole body of Delian inscriptions is given to the world—these *προδανειστάι* must be persons who *borrow for another*. Although *δανειστής* never seems to mean 'borrower' and *έκδανειστάι* (*Ditt. S.I.G.* 253, 38, *cf. ib.* 233 *passim*) are officials appointed to invest public funds, still *χρήστης* is used for 'debtor' as well as for 'creditor' and there is the valuable testimony of *B.A.G.* i. 192. 26 *προδανειστής* δ ἀντὶ τοῦ δανειζόμενον γραφόμενος τὴν διολογίαν. It is natural to ask if there is any example of *προδανειστής*, 'to borrow for another.' Not, it would seem, in the Delian records. The inscription of the year of Demares (*Bull. vi.*) contains the verb *προχρήσθαι* *i.e.* p. 8. ll. 24. 25 θέσαν εἰς τὸ ιερὸν ταμίαι Καιβών καὶ Μηγοκλεῖδης εἰς ἀπόδοσιν τῷ θεῷ οὐ προεχρήσατο ή πόλις εἰς τοὺς στεφάνους τὸν τε βασιλεῖ Φιλίππων καὶ τὸν βασιλεῖ Εὐμένει καὶ τὸν εἰς Ρόδον : p. 9. ll. 42. 43 θέσαν εἰς τὸ ιερὸν ταμίαι Μένυλλος καὶ Φωκαῖες κατὰ τὴν διάταξιν.....εἰς ἀπόδοσιν τοῦ προχρησθέντος εἰς τοὺς στεφάνους τῷ βασιλεῖ Φιλίππων καὶ τῷ βασιλεῖ Μαρανάσῃ : p. 13. l. 87 θέσαν ταμίαι Καιβών καὶ Μηγοκλεῖδης εἰς τὸ ιερὸν, τῷ ἀποταγέν εἰς τὰς εἰκόνας, οὐ προεχρήσατο ή πόλις τῆς δοθείσης δωρεᾶς τοῖς Αἰτωλοῖς κατὰ τὸ ψήφισμα τοῦ διῆμον Η Η

Η Η : ll. 89-90 record the payment of a second instalment of this debt. In these passages η πόλις προεχρήσατο plainly corresponds to ὁ θεὸς προέχρησε τῇ πόλει, so that προχρήσθαι will mean 'to borrow without interest.' There happens however to be an example of the middle *προδανειστής* in Attic, which has not yet, so far as I know, been explained with any clearness. I refer to Hyperides *c. Dem.* xii. (iv.) 27 *sqq.* Blass : (*τοσούτον καταπεφρόνηκεν Δημοσθένης ὑμῶν καὶ τῶν νόμων*) ὥστε τὸ μὲν πρῶτον.....ὑμοὶ λογεῖν μὲν εὐληφέντες τὰ χρήματα [αἱ ἀλλα] κατακεχρήσθαι αὐτὰ ὑμῖν προδεδανεισμένος εἰς τὸ θεωρικόν· καὶ περιών Κνωσίων καὶ οἱ ἀλλοι φίλοι αὐτοῦ ἔλεγον ὅτι ἀναγκάσσοντι τὸν ἄνθρωπον οἱ αιτιώμενοι εἰς τὸ φανερὸν ἐνεγκεῖν ἢ οὐ βούλεται καὶ εἰπεῖν ὅτι τῷ δῆμῳ προδεδάνεισται τὰ χρήματα εἰς τὴν διοίκησιν. ἐπειδὴ δὲ ὑμῶν οἱ ἀκούσαντες πολλῷ ἡγανάκτουν ἐπὶ τοῖς κατὰ τοῦ πλήθους τοῦ ὑμετέρου λόγοις εἰ μὴ μόνον ικ[α]νὸν εἴη αὐτῷ [τῷ] δεδωροδοκη[κέναι] : *desunt c. vers. xi.*

Arnold Schaefer's version is not close enough to show his view of the middle : see *Demosthenes u. s. Z.* iii. p. 322, 'Demosthenes erklärte, er habe allerdings diese Summe (20t.) empfangen, aber sie zu einem Vorschusse an die Theorikenkasse verwendet.' Blass, *Att. Ber.* iii. 2. p. 65 gives this paraphrase : 'Anfänglich sagten Demosthenes und seine Freunde, er habe das Geld allerdings genommen; aber als Ersatz von Vorschüssen für die Theoriken kasse, womit er also das Volk beschuldigte.' He agrees, I think, with Holm, *Gr. Gesch.* iii. p. 420, who translates 'Er sagte...er habe dem Theorikon 20 Tal. vorgeschossen und diese nun vom Harpalosgelde zurückgenommen.' Holm apparently holds that Demosthenes pretended to have advanced the money before the arrival of Harpalus, for he asks what right had the orator to abstract twenty talents from the sequestered treasures, even if he had really lent such an immense sum to the state. Whether Blass and Holm take the preposition to mean 'previously,' I do not venture to decide, but the force of the middle *προδανειστής* is certainly not made plain. The problem is this. Did Demosthenes represent himself as a *προδανειστής* in the sense assigned to the word by *B.A.G.* i. 192 and by M. Homolle's interpretation of the Delian inscriptions ? Or did he only claim to have borrowed from Harpalus without interest 20t., which he then advanced to the state at his own risk ? In the first case the responsibility of the people was very serious ; for though Demosthenes was

intermediary, signing the bond and incurring liability, yet the state or officers of the state were involved in a formal contract with Harpalus. On the second hypothesis Demosthenes' action is exactly similar to that of Lycurgus, except that I can find no evidence that Demosthenes held any financial office in the first half of 324 B.C. Pseudo-Plutarch *l.c.* describes Lycurgus as lending to the state without interest (*προδανείσας*) large sums of money entrusted to him by private persons; Demosthenes, if Hyperides is to be believed, professed to have borrowed without interest (*προδανειούσος*) from Harpalus in order to pass on the money to the state. The two writers seize on different aspects of one and the same transaction. It is unfortunate that Hyperides' denunciation of Demosthenes' plea is cut short by a gap in the papyrus, but his indignation whether real or simulated is not inconsistent with the second interpretation. For if Demosthenes' assertion was true the board that administered the Theoricon might be required to restore the 20t. and Demos would be in danger not only of finding his amusements curtailed but of falling under the displeasure of the all-powerful Alexander. For my own part I incline here to the second explanation, but at the same time *B.A.G.* i. 192 is evidence that *προδανειστής* in the special sense discussed above was not confined to Delos, since the δικῶν ὄνόματα which form the fourth Lexicon Seguerianum will be found on examination to be drawn from Athenian institutions and the speeches of Athenian orators.

Two Latin words are affected by the results of this discussion. The Graeco-Latin

glossary ('Cyrilli') in the *Corpus Glossariorum Latinorum* II. p. 417 interprets *προδανείζων* by 'promutuor,' which is translated in *Lewis and Short* 'to be loaned beforehand.' The same volume of the *Corpus* contains also *προχρεῖα hoc antecessum hoc promutum, προχρησταὶ procommode* (p. 425), *promotum προχρεῖα* (p. 505). I do not know whether any one has proposed to substitute 'promutuum' for 'promutum' and 'promotum' in these articles: the correction is simple. *Lewis and Short* translate the substantive 'promutuum' simply by 'an advance, a loan,' but the adjective 'promutuus' in Caesar, *B.C.* 3. 32. 6 (*imperabatur publicanis, ut in Syria fecerat, insequentis anni uectigal promutuum*) by 'demanded in advance as a loan.' This version, like that of *Merquet*, 'vorausezahl als Vorschuss,' is a little confusing. The adjective need mean nothing more than 'as a loan,' 'als Vorschuss' (*Menge and Preuss*); the fact that in c. 31 Scipio's proceedings in Syria are described by 'insequentis anni pecuniam mutram praecepere' is not conclusive proof that in c. 33 the 'pro' of 'promutuum' must refer to time. Whether, as the dictionaries say, 'promutua uectura' of the *Digest* means 'carriage prepaid,' I leave for the present undetermined. Doubt is justifiable.

In conclusion it may be worth while to point out that the reading of *C.I.A.* ii. 834. b. i. 39 is *τὸ προσδανεισθὲν εἰς τὸ διατείχισμα τὸ Ἐλευσῖνι παρὰ ταμίου στρατιωτικῶν καὶ παρὰ ἀποδεκτῶν καὶ παρὰ τοῦ τραπεζίτον*. M. Dürrbach in his valuable study on the orator Lycurgus has *τὸ προδανεισθὲν* (p. 98. n. 4) probably by an oversight.

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THE ETYMOLOGY OF ἐλέν.

In the *Philologische Rundschau* i. 1591 Osthoff compared ἐλέν with Lat. *uelle*, Germ. *wollen, wählen*. This etymology he has since given up (*Paul u. Braune's Beiträge* xiii. 457) on account of the Homeric forms which show no certain indication of digamma, and because the Gortyn inscription, in which digamma at the beginning of a word is kept, has in this word no traces of digamma, ἐλῆν, ἐλόντα, etc. He now connects (*l.c.*) ἐλέν with Teut. *saljan* 'übergeben, einhändigen' (properly causative **solejo* 'cause to take'); Ags. *sellan*, Eng. *sell*. Solmsen (*K.Z.* xxxii. 280) rejects Osthoff's etymology partly for

semasiological reasons, partly on account of traces of the digamma in Homer, particularly in the substantives ἐλωρ, ἐλώρα, which he says cannot be separated from ἐλέν. He himself supposes that ἐλέν originally began with digamma, but gave it up under the influence of *αἴρειν*, which he connects doubtfully with old Bulg. *sila* 'kraft,' Lith. *syli* 'kraft,' *silyti* 'zwingen.' The possibility that one of two verbs united together to form a system may have acted upon the other in this way cannot be denied; if it were certain that ἐλέν at one time had digamma, it would be hard to find any other explanation of the loss of it. In the case of the verb

evidence of *F* is very weak (cf. Solmsen *l.c.*). The only passage that speaks strongly in support of it is B. 332 *ἀστυ μέγα Πράμουο θλωμεῖ*, but, unless there is other evidence outside the verb, this single passage will hardly turn the scale in favour of *F*; Fick reads *θαλώη*. It is otherwise with *θλωρ*, *θλώρια*; here *F* is either demanded or permitted by the metre, except in v. 208 *μή τός μοι θλωρ*, as Solmsen remarks, 'eine gewiss nicht alte partie.' But it is by no means certain that *θλωρ* and *θλεῖν* are connected. In fact *θλωρ* has a distinct and specific meaning of its own in which *θλεῖν* does not share. It is not for nothing that Greek commentators explained *θλωρ* by *θλυσμα*; its associations lie with *θλεῖν* rather than with *θλεῖν*, cf. A. 4 *αὐτοῖς δὲ θλώρια τεῦχε κύνεσσιν* with P. 558 *ταχέες κύνες θλκύσσονται*, X. 336. The only passage where *θλωρ* shows any clear approximation in meaning to *θλεῖν* is v. 208, a passage suspicious for other reasons; *θλωρ* then cannot be urged as a strong proof that *θλεῖν* had once *F*. *θλωρ* has been well compared by L. Meyer *Vgl. Gram.*² 156 with Lat. *uellere* (also *uoltur*, *uel*), of which *θλκω* may be an extension.¹

¹ This would be impossible if Fick *Vgl. Wh.*⁴ i. 552 be right in separating *θλκω* altogether from Lith.

In the case of *θλεῖν*, as we have seen, the evidence is against initial *F*, and points to *i* or *s*. *θλεῖν* may, then, very well be compared with Ir. *tellaim* 'take away, steal,' = **to-sellaim*, cf. *do-sella*, *Leabhar na h-Uidhri* 73⁵ 14, *madudéll ni*, si quid furatus est, *Würzb. Gl.* 22⁶7. *sellaim* may stand for **sel-náimi*.² This does not overturn Osthoff's comparison with *saljan*; it rather goes to support it, for Ir. *sellaim* on the one hand can hardly be separated from *saljan*, and on the other approaches very closely in meaning to Gr. *θλεῖν*.

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νεθκ and putting it with Lat. *suclus*. But the words agree so closely both in form and in meaning that they can hardly be separated. Brugmann *Grundriss* i. 147 (cf. also ii. 476) explains the initial of *θλωρ* from the influence of *θλκ-*, *θλ-* cognate with *suclus*. In that case the shorter *Fθλ-* of *Fθλωρ* has remained unaffected. As to the breathing of *θλωρ* no stress can be laid upon it: it is evident that in later times the word survived only as an archaism, and it may very easily have been invested with the rough breathing through association with *θλεῖν* or *θλκεῖν*.

² Before *-náimi* a weak form of the root might have been expected. This is probably to be found in *tallaim* 'take away, steal' which can hardly be separated from *tellaiw*: *tallaim* might be explained from *to-salnáimi* (*s-a* = *sal-*). By the side of *sal-* there appeared in certain parts of the verb *sel-*, and levelling set in in one direction or the other.

LATIN *NORMA* AGAIN.

SOME points in Mr. H. D. Darbshire's exhaustive criticism (*C. R.* vi. pp. 147—9) of my derivation of *nōrma* call for remark.

It is unjust to say that Prof. Havet 'loosened the laws of Latin etymology' when he suggested that in Latin the combination *n + m* in non-compound words becomes *rm*, and thus at once obtained the simplest and most obvious derivation possible for *carmen* and *germen*, as from *canō* and *genō* respectively. The rule has no exceptions, though from the nature of the case it has few instances; roots ending in *n* are rare (Whitney gives only twenty-four such in Sanskrit), and it is only in *carmen* and *germen* that such roots are in Latin combined with a termination beginning with *m*.—There was no reason why *anima* should lose its *i*: why my **nōnima* did so I have already explained, it was in order to get a disyllable like the other technical terms with the same ending, *fōrma* and *grōma*.—Mr. Darbshire has quite misunderstood me if he

thinks that I supposed the hypothetical **camnen* etc. to have ever actually existed for a moment: my contention is just the reverse, that the combination *nm* in non-compounds was unpronounceable to a Roman, and that therefore he substituted *rm* for it.

In Latin inscriptions down to about B.C. 190 (Corssen, pp. 8—9) C and G and, when A follows, C and K are used indifferently. During that period the supernumerary letters G and K would no more be considered integral parts of the Latin alphabet than the Etruscan K, found occasionally in inscriptions (Deecke in *Encyclopaedia Britannica*) but not recognised in the Etruscan abecedarium which we possess, was considered an integral part of the Etruscan alphabet. After B.C. 100 the use of C for G, and of K for C, was confined to abbreviations, and the Latin alphabet consisted of twenty-one letters (Cic. *N.D.* 2, 93), arranged doubtless as in our alphabet: G fell into the place which, in the Latin alphabet as compared with the Greek, was vacant before

H. (Z not being admitted into the Latin alphabet till after Quintilian's time,¹ and then, as a foreign letter, relegated to the end), while K was put, as in Greek, between I and L.

My derivation of *nōrma* has the advantage of involving no 'change of sense' at all: on my view *nōna*, at the time when *nōrma* was formed, meant L as distinctly as *sexta*² meant

¹ Quint. 12, 10, 27 *juicundissimas ex Graecis literas non habemus, vocalem alteram, alteram consonantem.*

² Quint. 12, 10, 29 *illa (litera) quae est sexta nostrarum.* Mr. Darbshire says that here 'the

F, and its derivative *nōnima naturally meant, if I may coin the corresponding English word, 'an L-er,' an instrument shaped like L, what our carpenters call an L-square. Mr. Darbshire's derivation of *nōrma* from the root of *nōscō*, as 'the line to be known,' requires a good deal of explaining: a right angle is not a line, and 'to be known' means nothing

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sense was clear from the context': by which he must mean 'from the example,' *frangit*.

GREEK SY- FROM TY-.

FINDING side by side Dor. *τύ*, Lesb. and Ion.-Att. *σύ*—Boeot. *τῦκον*, Ion.-Att. *σῦκον*—Ion.-Att. *τύρβη* (Lat. *turba*), Att. *συρβηνίς*—Dor. *τύρισδο* (Theocr. 1, 3), Ion.-Att. *σῦριζω*: or again Sk. *vátlas* 'mad,' Hom. *ἀ(γ)γριοντος* 'wicked'—Sk. *catúras* (Acc.) Lith. *ketur*, Hom. *πίσυρες* Lesb. *πέρυρες*: we should naturally, but for a preconceived opinion, see here in *σύ* a dialectic representative of *τύ*. So, comparing *sup* in *τύπος* with *srep* in Ags. *svēfn*, we should see in *σύρμα*, *σύρα* a *tur*, Ablaut of *tver* in Sk. *tvar* 'hasten,' O.H.G. *dveran* 'mix'; and in the termination *-συνο-* (e.g. *γηθόσυνος*, *γηθόσύνη*) a *-tuno-*, Ablaut of *-treno-* in Sk. *-tvanám* (e.g. *vasutvanám* 'wealth').

To these eight apparent instances of *σύ* from *τύ* I would make three additions: (1) *ἀλοσύδηνη*, *Il.* 20. 207, *Od.* 4. 404, = **ἀλο-τύδ-ηνη* 'of the sea wave' (Middle Irish *tund* 'wave,' Lat. *tundō* 'beat'), with the same stem as in *ἀλόθεν*, *Il.* 21. 335. The word can hardly be *ἀλο-ιδηνη* 'of the sea water,' Fick, *Wörterbuch*,⁴ 1. 546, since this would presuppose a combination *ἀλὸς* *ιδηρ*, which is not Homeric (it is only in the *Odyssey* that *ιδηρ* is used of the sea, and then only in the combinations *ἄνεμος τε καὶ ιδηρ*, 3. 300, and *ἀλμυρὸν ιδηρ*), and the only Homeric compound beginning with a genitive ('Ελλῆς πόντος is scarcely a compound) is the isolated *οὐδενός-ωρα* 'caring for no one,' *Il.* 8. 178. (2) *δασύς* = **δατ-ύς* as Lat. *densus* = *dñt-tós*, Albanian *dent* 'make thick.' G. Meyer explains *δασύς* as **δητ-σύς*: but there is no termination *-σύ-*. (3) *συνχνός* 'long, numerous' = **τυχνός* 'ordinary' (cf. *τυχών*), a Litotes for 'sufficient, considerable.'

But in the great majority of words *τύ-* is as constant in Lesbian and Ionic-Attic as in

Doric; and hence philologists have agreed to explain away the few cases in which it seems to become *σύ-*. The forms *τῦκον* and *τύρισδο* indeed they ignore: the connexion of *vátlas* and *ἀγριοντος*, reasonable as it is, they deny (Wackernagel, *K. Z.* 24. 609) without suggesting anything better. The *-σ-* of *πίσυρες*, *πέρυρες* they would deduce from the *-στ-*, representing *-tv-*, of *πέρυρες*,¹ *τέρυρες*, without explaining why the latter never in Attic became **τέρυρες*. The *-σ-* of *σύ* they hold is borrowed from the oblique cases² (Brugmann, *Grundriss*, 2. 440), that of *-συνο-* from a supposed byform *-σένο-* (or rather *-σενο-*) representing *-tveno-* (do. 2. 70 n.); and so, I suppose, the *-σ-* of *συρβηνίς* from a byform **σερβ-* representing *tverb-*, and that of *σύρα* from a byform **σερ-* representing *tver-*. As to *σύ*, it is difficult to see (1) why **τύ* had its consonant transformed by the influence of *σέ*, *σέο*, *σοί* instead of having it preserved by the influence of *τοί* (locative of *σύ*, *Grundriss*, 2. 447), which in Homer is nearly as common as all the other oblique forms put together (in *Il.* 1-3 I count 23 instances of *σύ*, 42 of *τοί*, 46 in all of *σέ*, *σέο*, *σοί*); or (2) why, if 'Analogy' works by any laws at all, *σέ*, &c., made **τύ* into *σύ*, but *μὲ τόν τοῖτον*, &c. did not make *ἐγώ ὁ οὖτος* into **γώ* **τός* **τοῖτος*. As to the other three instances, it is unfortunate that the supposed **γηθόσενος*, **σερβηνίς*, **σερψίω* have died out and left no trace of their existence:

¹ Aeolic (Hesychius), with the 'Aeolic' *v* for *o*, G. Meyer, *Gr. Gr.* 2. 62. I would explain it as = **πέτρερες*, standing to **πέτυρες* (*πέρυρες*) as Lith. *ketveri* to *keturi*.

² I.e. *tv-* is represented by *-σ-* in *σέ*, *σέο*, *σοί*, as apparently also in the obscure words *σαργάνη*, *σεύτλων*, *σηλία*, *σημερον*, *σιλφη*, which have byforms (also Attic) *ταργάνη*, &c., G. Meyer, 263.

it is perhaps simpler to hold with Wackernagel *ut supra* that *-συνο-*, *συρβηνές*, *σύρω* represent *-τζονο-, *τζορβηνές, *τζορζω, with the same change of *o* to *u* as in *νύξ*, *μύλη*, *φύλλον*, *ἐπώνυμος*, *πρύτανις*, &c., G. Meyer 61.¹

These last words must have belonged originally to some sub-dialect which made *every o* into *u* (as conversely the lower orders at Rome, the progenitors of the Romance languages, made *every u* into *o*), and from it have passed into the literary language and ousted the proper forms *νύξ, μόλη, *φόλλον (Lat. *nox*, *mola*, *folium*), &c. So, according to the latest authority on the subject,

¹ Brugmann, *Grr.* 2, 70 n., suggests that *-συνο-* and *-τζονο-* may both come from *-τζυνο-*, as, he thinks, *οὐρανός* and Sk. *Váruṇa* both come from **varṇo-* (or, as he prefers to write it, **varṣṇo-*): but this at most proves only that *vn* may appear as *vn* in Sanskrit, not that it could in Greek. And the *-o-* still remains unaccounted for. As a matter of fact, Varunus was 'the god of the waters, the night, and the west' (Böhtlingk), and had nothing whatever to do with the sky, *οὐρανός*.

Bechtel, *Hauptprobleme der Indogermanischen Lautlehre*, p. 356 sq., the labial (for dental) before *ε* or *ι* in *βία*, *βίος*, *θέρος*, *πίσυρες* must have been purely dialectic, and cannot be explained as 'Formübertragung'; and according to Brugmann himself, *Grundriss*, I. 369, the forms *lacruma*, *oleo*, *solum*, *solum*, &c., made their way into literary Latin from some 'local dialect' (apparently of Oscan, *Etyma Latina*, p. 125) in which every *d* must have been pronounced as *l*. In the same way, I would suggest, some sub-dialect of Aeolic or Ionic must have made *every τυ-* into *συ-*, and from this sub-dialect *ἀγόνλος*, *ἀλοσθόνη*, *πίσυρες* passed into Homeric Greek, *δασύς*, *σύν σίκον*, *σύνηγξ*, *-συνο-* into Homeric and then into Ionic-Attic, and *συρβηνές*, *σύρω*, *συνχόνης* into Attic. Every literary language is a mosaic: in 'The skipper went to his ship in a well-equit'd skiff' we have four different dialects.

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GLEANINGS FROM DIODORUS SICULUS.

1. τὸ ἔμψυχον (an animal), I. 72.

τροφῆν δὲ οὔτε τὴν ἀπὸ τῶν ἔμψυχων, οὔτε τὴν ἀπὸ τοῦ πυροῦ προσεφέροντο. Cf. Thuc. vii. 29.

2. βαπτίζειν ταῖς εἰσφοραῖς (to drown with taxes), I. 73. Cf. Plut. *Gallia*, 21.

τοὺς δὲ ιδότας διὰ τὴν ἐκ τούτων εὐπορίαν οὐ βαπτίζουσι ταῖς εἰσφοραῖς.

3. κρίκος, (a ring for the lip), III. 8, speaking of the Ethiopian women.

καθοπλίζονται δὲ καὶ τὰς γνωτὰς, ὅριζοντες αὐτὰς τεταγμένην ἡλικίαν, ὃν ταῖς πλείσταις νόμιμον ἐστὶ χαλκοῦν κρίκον φέρειν ἐν τῷ χείλει τοῦ στόματος.

4. κύτος (the shell of the tortoise), III. 21.

κοιμῶνται μετέωροι τοῖς κύτεσι πρὸς τὸν ἥλιον, παρεμφερῆ τὴν πρόσοψιν ποιοῦσι ταῖς κατεστραμμέναις ἀκάτοις. Also further on:—τοῖς δὲ κύτεσιν οὐσι σκαφοειδέστι χρῶνται πρὸς τὸν εἰς τὴν ἡπειρον διάπλουν.

5. καταπαίνειν used with the meaning of καταπαίσθαι, XI. 18 (end).

διὸ καὶ τρύμαν μὲν ἀνακρούεσθαι κατέπανον. Euripides (*Hecuba*, 918) uses καταπαίσας for καταπαίσαμενος.

6. ἔξορφος (having six stories), XIV. 51.

προσήγαγε δὲ καὶ τοὺς ὑποτρόχους πύργους τοῖς τείχεσιν ἔξορφους ὄντας.

7. ἀναρρήτω for ἀναρρήγνυμι, XIV. 72.

αἱ ναῦς πλείσταις ἐμβολαῖς ἀναρρήτουσαι τὰς συγγεγομφωμένας σανιδὰς δεινὴν ἔκπληξιν τοῖς ἀντιταπομένοις παρείχοντο. And further on:—αἱ μὲν ἐκ τῶν ἐμβολῶν ἀναρρητόμεναι λακίδες ἔξαιστον ἐποίουντο ψόφον.

8. θάπτειν (to put to death), XVI. 82.

μετὰ δὲ ταῦτα τὸν μὲν Ἰκέταν καταπολεμῆσας ἔθαψε. Dr. Holden in a note on Plut. (*Timol.* 32) suggests ἔθαντώσε.

9. ῥὰ κενὰ τοῦ πολέμου (feints of war), XVII. 86.

Οἱ δὲ Ἀλέξανδρος τοῖς κενοῖς τοῦ πολέμου καταπρατηγήσας τοὺς Ἰνδοὺς, χωρὶς κινδύνου ἐκνέυσε τῆς πέτρας.

10. εἰκάζειν (to imitate, mimic), XX. 63, of Agathocles.

ὑπάρχων δὲ καὶ φύσει γελωτοποίος καὶ μύρος, οὐδὲ ἐν ταῖς ἐκκλησίαις ἀπειχεῖτο τοῦ σκώπτειν τοὺς καθημένους, καὶ τινας αὐτῶν εἰκάζειν.

11. συνακρωτηριάζειν (to cut off the extremities with), fragment of book 34.

οἱ Σύροι οἱ δραπέται τῶν ἀχμαλώτων τὰς χεῖρας ἀπέκοπτον οὐκ ἀρκούμενοι ταῖς παρὰ τοὺς καρποὺς τομαῖς, ἀλλὰ σὺν αὐτοῖς τοῖς βραχίοσι συνακρωτηριάζοντες.

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NOTES ON OVID.

Heroides II. 111.—P. has *laetissima*, i.e. *laetissima*, which makes perfectly good sense, and should be read.

Ibid. 114.—Exist P. (Palmer suggests *excitat.*) Perhaps *explicit*, i.e. ‘sacred Hebrus unfolds his rapid floods.’

III. 132.—There is no need to alter *sinum*: the corruption rather is in l. 131, where *solitis lacertis* is due to assimilation to *praesentis*, and produces a very harsh assonance. Read:

est aliquid collum solitos tetigisse lacertos,
praesentisque oculos admonuisse sinum.

IV. 26.—*que uenit* for ‘she who comes to love’ is very harsh: and Sedlmayer’s defence that Propertius uses *uenio* in an ambiguous sense is unsatisfactory, as the lucid style of Ovid is very different from that of Propertius. Read *quam ferit*, sc. *crimen*, ‘intrigue.’

VI. 37–38 are unnecessarily obelised by Palmer following Merkel. Sedlmayer removes the brackets: but the punctuation requires alteration. Read:

‘deuictus serpens?’ iterum si uiuat Iason
quaerimus: alternant spesque timorque
fidem.’

deuictus serpens, it has not been observed, gives the question in direct speech. She is afraid the dreadful serpent must have killed him, and can hardly believe that he has escaped it. This is her *timor*. Again, she hopes that he may be still alive. This is her *spes*. Translate:—“ Is the serpent mastered ? ” Again I ask questions in the hope that Jason may be alive: now hope and now fear prompt me to believe what they suggest.’

VII. 45.—*quid non censeris inique* P., which is printed with a mark of corruption by Sedlmayer, who thus looks upon the line as desperate. I believe the right reading to be:

non ego sum tanti—quid me uerearis,
inique?—cett.

Then *me uerearis* balances *me fugis* in the next line and *inique* is the vocative, and not an adverb. ‘It is not so important to get rid of me—why should you fear me, cruel one? —that you should be drowned while flying from me across the broad sea.’

97. This line, as printed by Palmer after the MSS., is, I think, genuine, though despised of by the editors. The tautology is due to the impassioned nature of the

language: *Sychaeo* must be dat. incommodi:—‘ violated to the shame of Sychaeus.’

IX. 126.—The reading of P. *fortunam nulti fassa tegente suam* (which is retained doubtfully by Shuckburgh) should not be altered with Palmer and Sedlmayer. Translate: ‘ confessing her fortune with looks that belie it.’ Deianira says that she would not have minded so much if Iole had been sent in the attire of a slave; even though her bearing might have shown that, despite her poor slave’s attire, she was assured of the love of Hercules. Deianira had often had to put up with the amours of her inconstant husband before: cp. 49 ff. What she did object to was the proud state with which the stranger came, which caused her to fear that this was no mere paramour, but that she herself would be deposed from her place as wife: cp. 131. (Ehwald obliterates this line.)

XII. 17.—*semina iecisset totidemque et semina* & (*corr. m. 2 seminat*) *hostes* P. The following correction I believe to approach nearer to the MS. reading than any yet offered; and I propose it with the less hesitation as that printed by Sedlmayer involves a false quantity. Read:

semina iecisset, totidem, quot seuerat, hostes.

XX. 3–4.—

perlege! discedat sic corpore languor ab isto,
† *qui meus est ulla parte dolore dolor.*

So Sedlmayer, who gives the line up as desperate. Read:

te meus est ulla parte dolente dolor—
i.e. te dolente ulla parte est meus dolor : if
you grieve in any respect, the grief is mine
also.

Epistula Sapphus (XV.).

41.—at mea cum legerem; †*tetiam formosa*
uidebar.

So Sedlmayer. Read:

at mea cum legerem tibi iam formosa
uidebar.

Amores. I. iii. 4.—Punctuate:

audierit nostras tot Cytherea preces ?

I. viii. 65.—

nec te decipiant ueteres quinquatria cerae.
So Merkel, following P.: but (1) we know nothing of the *imagines* being brought out at the *quinquatria*, and (2) the latter word has no construction. It could hardly be acc. of time. Heinsius’ conjecture, accepted by Ehwald, *circum atria* (1) is palaeographically improbable, and (2) is so easy that it is not likely to have been altered.

In the first place I imagine that the *quing* of *quinquatria* arose from the eye of the scribe wandering down to the *quin* or *qui* *quia* of 67, and knowing the word *quinquatria* he may easily have been led to introduce it. We learn from *T. II.* 521,

scilicet in domibus uestrīs ut prisca uirorum
artificis fulgent corpora picta manu,

that the waxen masks of ancestors, which stood in the atrium, were painted. Read therefore :

nec te decipient ueteres, picta atria, cerea,
construing *picta atria* as in apposition to
ueteres cerea. The atrium, with its rows of
painted busts around it, might well be de-
scribed as *pictum*. 'Let not those ancient
waxen masks, those painted halls, deceive
you.' Cp. *F. I.* 591. Mayor on *Iuu.* 8. 1
and *Iuu.* 8. 19 which is a reminiscence of
this line.

II. xvii. 11.—

non tibi si facies animum dat nomina
regni P.S.

Read :

non tibi si facies animum dat et omnia regni,
'not if your beauty fills you with pride and
omens of empire.' Ovid is very fond of
talking about omens : cp. *H. XVI.* 159, 234,
XVIII. 151 ff. (if these are genuine) : *Am.* 1.
xii. 3 ff. *ibid.* 28, xiv. 41, II. xiv. 42.

III. viii. 41.—Read *terras scindebat* with
P. Cp. *T. IV.* vi. 13.

III. xiv. 42.—*falsis muneric* P. Read : et
falsi muneric instar erit (a most simple
correction). 'And it (your confession of
your guilt) shall wear the semblance of a

service, though it be no true service,' but a
pretended service.

Ars Amatoria.

II. 726.—*desine* ought to be equivalent to
desere, as Heinsius takes it ; but the par-
allels he quotes are either irrelevant or (*M.*
III. 478, *VII.* 850, *P. II.* vii. 83) break down,
as a part of *desero* not *desino* is read there by
the best MSS. The use then cannot be
allowed. I believe *dominam* to be due to
some scribe who misunderstood *desine*. Read :
sed neque tu domina uelis maioribus usus
desine, nec cursus anteat illa tuos—
domina being abl. after *maioribus*.

Remedia Amoris.

699.—The ellipsis of a verb to govern
sagittas is too harsh to be allowed. For *ego*
read *peto*. The cause of the error may have
been a gloss : thus

^{ego}
non peto Dulichio furialis more sagittas.
(Ehwald reads *frustrari* for *furialis*, a
rather violent change.)

Medicamina Formae.

27-28 are bracketed by Kunz, and are
certainly corrupt. Read :
pro se quaeque parent—nec quos uenentur
amores

refert—munditia crimina nulla merent.
(*quaeque* is nom. fem., and not = 'et quae'
as Kunz takes it.)

35.—Kunz's conjecture is unnecessary,
the *urguet* of the Florence MS. should be
retained. Read : sie potius nos urguit
amor etc., which is well supported by *Am.*
II. xviii. 20

ei mihi, praeceptis urgueor ipse meis.

S. G. OWEN.

HERODAS, COL. XI. LL. 11, 12.

LINES 11 and 12 of column 11 in the
Herodas papyrus have given some trouble
to editors. The former, all agree, runs :

'κῆπορνοβόσκεν πάτες· ἀλλ' ἔκητ' ἀλκῆς.'

Of the second the beginning is clear :

ΘΑΡΣΕΩΝΑΕ.

Then follows what can only be the first half
of an omega, so that we are safe in reading :

ΘΑΡΣΕΩΝΑΕΩ.

Next comes a rent in the papyrus, giving a
space in which one long or two short letters
might have been written. On the other side
of this rent a magnifying glass reveals a
faint but unmistakable omega. After this

there is a worn extent of papyrus sufficient
for one letter, then another gap sufficient for
one more, and then a somewhat blurred
mu, or perhaps nu, curiously read by Mr.
Kenyon as ΟΙ. The rest of the line is quite
clear :

ΜΑΝΙΘΑΛΗΣΙΗ.

The whole therefore runs :

ΘΑΡΣΕΩΝΑΕΩ — Ω — — Μ Μ Α Ν Ι —
ΘΑΛΗΣΙΗ.

Changing nothing in the text, I propose to
read :

'κῆπορνοβόσκεν πάτες· ἀλλ' ἔκητ' ἀλκῆς
θαρσέων, λέων ὡς ἐμμανεῖ Θαλῆς εἶη,'

translating approximately .

'But, bold because of his strength, Thales rages like a lion in the jungle.'

This reading makes good sense, and preserves, as no other has attempted, the final iota of ΗΙ.

εἴα, connected, in feeling at any rate, with εἰαμένη, means primarily 'grass,' and is translated in Suidas and Hesychius by χόρτος. Cf. χόρτους ἐν λέοντος (Pind. *Ol.* xiii. 62).

ἐμανεῖν or ἐμμανεῖν would be the regular verbal formation from ἐμμανῆς.

The Greek idiom which in the simile makes Thales 'rage in the jungle like a lion' instead of 'rage like a lion in the jungle,' is well known (cf. Eur. *Cycl.* 433, 434). The reference to a lion is possibly helped out by the 'γελᾶς; κίναδός είμι' of col. 11, line 8, to which it stands in opposition, as κίναδος might well suggest κίναδος. Indeed κίναδος and κίναδός appear to have been treated by the Greeks as forms of the same word.

R. J. WALKER.

HEBREWS XII. 18.

οὐ γὰρ προσεληλύθατε ψηλαφωμένῳ καὶ κεκαν-
μένῳ πνύῃ καὶ γνόφῳ κ.τ.λ.

The text as it stands is full of difficulty. The retention of ὅρει after ψηλαφωμένῳ is critically indefensible, while the view that it was present in the writer's mind because it occurs four verses further on is unsatisfactory. It is doubtful whether the connection of the participle with πνύῃ provides us with any better sense.

ψηλαφωμένῳ is usually rendered:

- (1) 'that was being touched.'
- (2) 'tangible,'—so 'material.'

If we connect ψηλαφωμένῳ with ὅρει expressed or understood, we are met with the insuperable objection that Sinai was *not* touched. To say, as Alford does, that 'was being touched' is equivalent to 'would have been touched had this not been forbidden' is absurd. Moreover why should this prohibition be referred to in two places so close together as verses 18 and 20? Even had this been the writer's intention he would have used one of the LXX. words θηγᾶν and ἄψασθαι, not the curious ψηλαφᾶν which does not mean 'to touch,' but 'to grope for.' There would be less difficulty, it is true, could we accept the exegesis of Bengel and others,—'qui tangebatur,—divinitus ita ut totus commoveretur.' But this is forced and fanciful.

As to the meaning 'tangible,' it is strange that so many commentators (e.g. Bleek, Delitzsch, Bp. Westcott, Hilgenfeld) apparently find no difficulty in such a rendering. It may fairly be said that there exists no

single instance of such a Greek usage as ψηλαφώμενος = ψηλαφητός. To quote τὰ σαλενόμενα in verse 27 is nil ad rem. The participle is not equivalent to σαλενά, but retains its proper force; the writer is referring to the visible signs of coming disaster—the old Judaistic system is already being shaken, is ἐγγὺς ἀφανισμοῦ.

It seems probable that the passage involves some primitive corruption. The omission of the first καὶ by D¹ 67² Harl. Theb. Arm. points perhaps to some early disturbance in the text. Delitzsch thinks that ὅρει was omitted by some second century scribe; another suggestion is that the original words were μὴ ψηλαφωμένῳ ὅρει. But in view of the unsuitableness of ψηλαφωμένῳ and the awkward collocation of the present and perfect participles—so foreign to the smooth Greek of the Epistle—it seems almost certain that the former word is a corruption which conceals the original reading. It is difficult to discover what this was. Could it have been ὑψει νενεφωμένῳ? The two expressions are not very dissimilar in uncials. The passage thus emended would run smoothly, would supply a proper antithesis to Σιῶν ὅρει in v. 22, and would fit in exactly with O.T. accounts, which represent the summit of the mountain as burnt with fire, while lower down it was enveloped in a dense cloud. See especially Exod. xix. 16, νεφέλη γνοφώδης, and cp. the description of Sinai in Clem. Alex. *Strom.* vi. p. 753, πᾶς ὁ πέριξ ἀπὸ ἐνεφοῦτο.

E. N. BENNETT.

THE LATIN GERUNDIVE.

I HAVE no wish to continue a polemic with Mr. Conway respecting the origin of the Latin Gerundive; but a few brief notes may be useful.

1. Mr. Conway combats the assumption of the determinative *dh* as explanatory of the *d* in *tendo*; he points to the persistence of the *dh* in all the tenses of verbs presenting this form—undoubtedly a strong counter-argument; and he also mentions Umbrian forms as inconsistent with the equation *tendo* = *ten-dho*. In this latter sphere of proof I am unable to cope with Mr. Conway, who I believe is recognised as an authority in this department. But the question still is: Which is more probable, *tendo* = *tenio* or *tendo* = *ten-dho*?—and in the paucity and ambiguity of the evidence adduced for the former, I am disposed to adhere provisionally to the latter.

2. *Funda*. It is not contended that *funda* has been evolved *regularly* from *σφενδόνη*. As a loan-word it was liable to capricious treatment so as to bring it into conformity with popular etymology; and it seems probable that the precise form *funda* was suggested by the word *fundo* (a sling being *ἰοχέαπα*), just as *écrevise* becomes 'cray-fish,' and *Château vert* Hill becomes 'Shotover Hill.'

3. I am afraid I must still disagree with Mr. Conway as regards the root *men*. It does not mean to 'show,' and the meanings assigned by Grassmann to the Sanskrit form follow easily from the idea of 'making mention,' 'calling to mind.' The question is not what a root *may* mean but what it *does* mean. Mr. Conway however is right, and I am wrong, as regards the existence of two roots *men* and *man*. No doubt *pav-* in *pávris* from *pav-*t*opai* is for *m̄y*, the weak form of *men*.

4. I think Mr. Conway is also right in denying the existence of a root *spa*, which I too hastily took from Fick. But if *spas* be the root, how does Mr. Conway get *sponia* from it? He will, I am sure, excuse my inadvertence in substituting my 'probably' for his 'possibly' in a quotation. The idea of a twisting or vibratory movement is clearly implied in the various references of *σφόνδυλος* (a 'vertebra,' a 'joint,' the 'spine' as made up of vertebrae, the 'round stone' that *twists* the spindle). I cannot see how

Mr. Conway gets the idea of 'framework' which does not seem inherent either in *spas*, *spend* or *span*.

5. Sanskrit *niṣas* = *nidus* = I.E. *ni-zdos*: *pīdāyāmi* (press out) implies **pi-zd* (sit on); *dū-dās* (ungentle, ill-disposed) implies **dus-dās* &c. That is, cerebral *d* indicates the falling-out of *z*. So in Latin *pēdo* = **pezdo* (Slovenic *pezdēti*), *trēdecim* = *trez-decim*, *idem* = *iz-dem* &c. Mr. Conway calls this 'irresponsible speculation'; I prefer to call it induction. No doubt *munzd* (not *munsd*) does not look well, but neither does **ghrzdeiom* as the prototype of *hordeum*, *Gerste*; and the employment of a double note of exclamation proves nothing. (See Brugmann *Grundriss* I. § 590, 594.)

6. My point was that in the anlaut I.E. *j* should be kept distinct from *i*; the former being represented in Greek by *ζ* (*ζέω* = **jes-āmi*, *yás-āmi*), the latter by the rough breathing (*ἄγος* from *yaj*). See Brug. *Grund.* I. § 598.

7. My theory does not seem to be based on groundless assumptions if it be the case (a) that *uen* is an infinitive suffix, which Brugmann lays down (*Gr. Gram.* § 146); (b) that *dus* was sometimes added to 'complete words' as in *udus* (= *ug-dus*), *surdus* (= *suor-dos* from *sner*), *tardus* (= *targh-dus*, from *targh, tragh, trah-*)—these words being Latin relics of an I.E. formation, real, though seemingly restricted in range. (c) Mr. Conway's examples of *ovis*, *juvencus*, &c., indicate that I should have expressed myself more cautiously; but there seem to be instances of the falling-out of *u* in certain suffixal forms, as in *-bo*, *-bam*; thus *cal-ēbo* = *cale-bhūō*, *calē-bam* = *cale-bhūām*. See Brug. *Grund.* I. § 170. (d) Is it not possible that words like *merenda* (lunch: query: from *mer*, *mr-nāti*, crush, *zerbröckeln*), *turunda* (ball of paste: query: *tur* = *tyr* from *ter*, rub, as *tul*- for *tll* from *tel*: see Brug. *Grund.* I. 296) may be relics of the form desiderated? (e) Mr. Conway's last objection does not present much difficulty. It is very doubtful whether the gerundive participle is intrinsically passive. Thus *volrendis* *mensibus* (*Verg. Ae.* I. 269) is parallel to *volventibus annis* (*Verg. Ae.* I. 234). See on this point Roby's *Lat. Gr.* Part II. Preface p. lxxviii.

G. DUNN.

WEISWEILER ON THE LATIN PARTICIPLE IN *-DUS*.

Das Lateinische Particium Futuri Passivi in seiner Bedeutung und Syntaktischen Verwendung, von DR. JOSEPH WEISWEILER. Paderborn, 1890. Mk. 2.80.

THIS pamphlet purposed to establish the following points:—(1) the name of the adj. form *amandus* should be the future passive participle, not the gerundive; (2) the original voice-meaning was not neutral or active, even in the gerund, but passive; (3) the tense-force is nearly future, and this form of the verb was not originally a present passive participle; (4) the meaning of obligation or necessity is in the participle, not in the combination with *est* and the dative; (5) the gerundive is not derived from the gerund, but the gerund from the participle. In each of these positions the author contradicts a view which has met with some acceptance. The doctrine that the gerundive was originally a pres. pass. ptc., especially, has been generally adopted, even in the school grammars.

The argument is complicated and difficult to summarize justly.

Chap. I. The adj. form is usually called by Roman grammarians the fut. pass. ptc., and this name is as accurately descriptive as the name of any ptc. The term *gerundiuia* arose from the attempt to apply the terms of Greek grammar to the phenomena of the Latin language, and has been further confused and misunderstood by modern scholars.

II. The numerous etymologies for the ending *-ndo-* are conflicting, and none has won general acceptance. We must be content to regard this as a completed termination in Latin, or at least we may feel sure that this is one of the cases in which the meaning of an ending can afford no help toward the explanation of the syntax. That must be determined by the facts of usage.

III. But a connection is probable between the fut. pass. ptc. and certain tense-stems. The variety of form (*-bundus*, *-endus*, *-undus*) can hardly be explained except by supposing a variety of origin. So the adj. in *-bundus* is connected with the 3rd plu. of the fut. in *-b*, *-buntur*, and *-endus* with the fut. of the 3rd. conjug. in *-entur*, while only the form in *-undus* is from a pres. stem, *-untur*. But the fut. in *b* came from the pres. stem by composition with the stem *bhu*, and only gradually assumed the distinct future sense; the adj. in *-bundus* was an off-

shoot from it before the present sense was wholly lost, and was therefore easily forced into a regular present meaning by the competition of the later-formed ptc. in *-andus*. The fut. in the 3rd conjug. came from the pres. subj. and even as late as the time of Plautus the two are not wholly differentiated, so that we may expect to find traces of subjunctive meaning in the ptc. in *-endus*, but with a general tendency toward the future. From the pres. stem came *oriundus*, *secundus*, *lubundus*, etc. Then, as in the fut. indic. and perf. indic., the force of analogy brought the forms in *-endus* and *-undus* together, with parallel meaning, somewhere between the fut. and the pres. subj., and later, by further analogy of formation, the ptc. in *-andus* and *-endus* of 1st and 2nd conjug. were made. [This chapter is exceedingly suggestive, and though the connection between the 3rd plu. *-nt* and *-ndo-* is not very clear, the main point appears to be fully established.]

As the attributive use of the fut. pass. ptc. coincides in general with this theory, it is necessary to discuss only the facts which seem to be opposed to it or which call for fuller explanation, *viz.*, the apparently active or neutral meaning in the periphrastic conjug. and in the gerund, the relation of the gerund to the ptc., and the source of the idea of necessity.

IV. Suffixes ante-date the distinctions of voice and therefore do not directly determine them, but as the adjectives formed from verb-stems assumed participial functions and took their places in the completed system of conjugation, their voice-meaning became more clear and precise, and there is no more reason for expecting a neutral meaning in the fut. pass. ptc. than in other forms of the verb. The confusion arises from deponent or neuter-passive verbs. In these there is a contradiction between form and function, which shows itself, for example, in the perf. ptc., and which leads to the active-neutral sense of *secundus*, *oriundus*, *uolundus*, etc. With active-transitive verbs, which afford the only real test, the passive meaning in the periphrastic conjugation is always distinct. The word *Kalendae* and the phrases *dea deferunda*, *adolenda*, etc., in the Act. Frat. Arval., are explained at length.

V. The gerund (or neut. of fut. pass. ptc.) in periphr. conjug. is an impersonal, and like

the regular impersonal has passive form with active or neutral meaning. The apparently active sense of *michi faciendum est* is therefore properly strong proof of the passive sense of *faciendum*, since only a passive form could give the active meaning. The acc. after such forms (*via, quam nobis ingredendum sit*) is retained from the active.

VI. The gerund is neither equivalent to an inflected infinitive, nor is it an abstract substantive from the neuter of the ptc. It is the declined form of the impersonal ptc., that is, *amandi* bears the same relation to *patriae amandae* that *amatur* bears to *patria amatur*. This explanation is in accord with the general use of the impersonal, and is supported by the impersonal use of the perf. ptc. (*inaugurato, de improviso, facto opus est*), and by the fact that down to late Latin the 'gerundive' construction is much more frequent than the gerund.

VII. In accordance with the future character of this ptc. it is found most frequently in those cases which express an end or aim, in the gen. final, in the dat., in the acc. with *ad*, and least frequently in the abl. The later increase in the use of the abl. corresponds to the increasing use of the abl. of nouns in the later Latin.

VIII. The hypothesis that the fut. pass. ptc. is connected with fut. stems, with some shading from the pres. subj. through forms in *-endus*, explains the idea of necessity more easily than the received explanation by analogy with *opus est mihi* and verbals in *-tio*, or the laboured metaphysical theory of Haase. The resemblance to clauses of purpose adds weight to this hypothesis. The nearest approach to pres. sense is in the abl. without preposition. The pure future sense, which is rare and rather late, shows that the ptc. has followed, though more slowly, the same course of development as the tenses from which it is derived, toward a precise and true future.

The process here outlined, by which the forms in *-bundus*, *-endus* and *-undus* from different sources were brought, under the working of analogy, to perform the same function, may at first sight seem unnecessarily complicated, but it is precisely the same process as that which has produced the future tense and the perfect (*te-tigi, par-*

si, ama-ui). At this point the theory is in full accord with the methods and results of historical grammar, and this harmony is one of the best evidences of its correctness.

The theory that the form under discussion was originally a pres. pass. ptc. seems to have arisen partly from a supposed connection between the suffix *-ndo-* and *-nt-* of the pres. act. ptc., and partly from the difficulty of explaining in any other way such words as *oriundus, secundus, Kalendae*. As to the first ground, it is the merit of this essay that the author recognizes the fact that the meaning of a suffix, even when it is clearly known, may be of little value in explaining the syntactical use, may indeed add a new difficulty to the question by revealing a wide gap between the proper sense of the suffix and its actual use. And as to the second point, arguments from the rare to the usual are always weak: any plausible explanation which brings the rare phenomena into harmony with prevailing usage lets the whole theory drop to the ground. Weisweiler's explanation of the pres. and act. sense of *oriundus, secundus*, etc., is far simpler and more convincing than any before proposed.

While therefore Weisweiler's theory of the fut. pass. ptc. is too complex and revolutionary to be accepted off-hand, I believe that it is, in its main lines at least, correct and destined to supplant the doctrine now found in many grammars. To establish it completely we need thorough examinations of the usage of different authors, especially in the earlier period. If the earlier literature should be found to show traces of difference of meaning between *-bundus*, *-endus* and *-undus*, beside those already known, such evidence would be conclusive. A study of the voice-meaning of fut. pass. ptc. with reference to the deponent, neuter-passive or transitive character of their verbs might also be fruitful. These are lines of work which might well be followed up by university students.

It may be added that the essay is written with clearness, with vigour of expression, with excellent temper and with not a little super-Teutonic humour.

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HOLDEN'S THUCYDIDES VII.

Εονκυδίδων Ἐβδομή. *The Seventh Book of the History of Thucydides.* The Text newly revised and explained with Introduction, Summaries, Maps and Indexes, by the Rev. HUBERT ASHTON HOLDEN, M.A., LL.D., Fellow of the University of London, Late Fellow of Trinity College, Cambridge, Editor of the *Cyropaedia* of Xenophon and of *Select Lives of Plutarch &c. &c.* Cambridge University Press 1891. [pp. lxiv. 384. 5s.]

IN writing the Commentary on this masterpiece of the greatest historian, I have not found much room left for original work; my task has been more or less limited to selection and arrangement. This task of selection and arrangement Dr. Holden has on the whole performed with great care and with sound judgment; so that he has produced a very useful set of variorum notes which will save the busy student the trouble of consulting several other books. In nearly two hundred pages of notes I have noticed only the following mis-statements: c. 21, 2 ἀπόπειραν λαμβάρειν, 'the substantive is not found elsewhere'—the whole phrase occurs in Polyb. 27, 4, 2: c. 58, 3 δύναται δὲ τὸ νεοδαρμῶδες ἀλεῖθρον ἥδη εἶναι, 'L. Dindorf . . . and H. van Herwerden were the first to doubt the genuineness of these words'—they were first suspected long long before by Portus. In the same note the editor continues 'Prof. Jowett . . . holds . . . that the idiomatic use of ἥδη is in favour of the genuineness of the clause.' But have Prof. Jowett and Dr. Holden never read the scholia on viii. 48, 5 and 89, 2, where ἥδη is equally 'idiomatic'? There is a strange note on c. 34, 7 ὅτι οὐ πολὺ ἐνίκων. 'If the cause had rested on the authority of the writer, the optative νικῶει would have been necessary.' But surely the opt. would then have been impossible, as the reference to Goodwin which is given by the editor would show. In ii. 21 ὅτι οὐκ ἐπεξάγοι does not give the cause assigned by the writer. c. 70, 8 Ἀθηναῖος is said to be retained by Böhme; but both Böhme's text and the Böhme-Widmann edition give the word in brackets. On c. 75, 5 ἐπὶ τοῖς ὄπλοις Dr. Holden says 'this is the conj. emendation of Pluygers for the reading of B ἵπὸ τοῖς ὄπλοις.' In the first place B omits ἵπὸ (Hude, *Com. Crit.* p. 38). Besides the conjecture was first made by Bothe: but Bothe's edition is

not mentioned in Dr. Holden's bibliography, in which also Elmsley's text (1804), Sitzler's edition (1890), von Essen's Index, and Junghahn's *Studien* (1886) are absentees; while van Herwerden's edition is described—presumably from Engelmann (1880)—as in two vols. 1877-8! From this last error it is evident that Dr. Holden is unacquainted with van Herwerden's text, a conclusion which is borne out by the Critical Notes, in which the conjectures in van Herwerden's *Studia* (1869) are taken as representing their author's final opinion. This is especially hard on a critic whose judgment on textual difficulties in Thucydides has been marked by an almost feminine mutability. Lastly in c. 69, 4 Dr. Holden says 'Arnold and Classen read καταλειφθέντα after the Scholiast.' But the Schol., as is rightly stated in the *not. crit.*, reads παραλειφθέντα.

In the text, the bracketing of ἐπὶ τοῖς ὄπλοις (c. 75, 5) and αὐτοῖς for αὐτοῖς (c. 36, 3) are probably misprints. It is perhaps superfluous for me to say that in the interpretation and reading of many passages I am unable to agree with Dr. Holden: otherwise I should not still have an edition of the same book advertised. In all these cases others will judge between us. I will merely mention a few places where I think that the editor has deferred too much to the opinions of predecessors. The text given is that adopted by Dr. Holden. In c. 21, 3 ξυναρέπειθε δὲ καὶ ὁ Ἐρμοκράτης οὐχ ἥκιστος αὐτοῖς ταῖς νανοὶ μὴ ἀθυμεῖν ἐπιχειρήσαι πρὸς τοὺς Ἀθηναῖους, λέγων οὐδὲ ἐκείνους πάτριον τὴν ἐπιπειράν . . . ἔχειν. Here οὐχ ἥκιστος αὐτοῖς is Stahl's conjecture for MSS. οὐκ ἥκιστα τοῦ; but, if a change is made in the punctuation, the MSS. reading requires no alteration: thus:—ξυναρέπειθε δὲ καὶ ὁ Ἐ. οὐχ ἥκιστα, τοῦ ταῖς νανοὶ μὴ ἀθυμεῖν ἐπιχειρήσαι, πρὸς τοὺς Ἀθηναῖους λέγων οὐδὲ ἐκείνους κ.τ.λ., where τοῦ μὴ ἀθυμεῖν is inf. of purpose, and πρὸς τοὺς Ἀ. λέγων = 'saying with regard to the A.', with hostility implied. No doubt πρὸς τοὺς Ἀ. λέγων would more naturally mean 'saying before the A.'; but who can deny that the words may mean what I suggest? This avoids the difficulty of constructing πρὸς τοὺς Ἀ. with ἐπιχειρήσαι. An important passage, which has caused trouble ever since Valla mistranslated it is c. 75, 4 εἰ τῷ δὲ προλίποι ἡ ῥώμη καὶ τὸ σῶμα, οὐκ ἀνευ [δλίγων] ἐπιθεασμῶν καὶ οἰωνῆς ὑπολειπόμενοι. Dr. Holden gives in his note the array of con-

jectures which have been proposed for $\delta\lambda\gamma\omega\nu$, and follows Krüger and Stahl in bracketing it. But I believe that Thuc. after all wrote $\delta\lambda\gamma\omega\nu$ here, and that the sense is (of course, not what Classen suggests, but) 'when any man's strength of mind and of body had failed him, he dropped behind only after a few appeals to heaven.' A man whose strength has utterly failed him may be, probably will be, capable of only a few appeals to heaven; which, as every singer knows, require vital energy if they are to touch the heart of God or man. The unexpected word $\delta\lambda\gamma\omega\nu$ was intended to emphasize the awful condition of those miserable men when at last compelled to drop behind. It is by no means certain that 'the sense requires $\text{o}\bar{\nu} \mu\text{et}' \delta\lambda\gamma\omega\nu$ ', which, by the way, is what Sitzler reads. In e. 68, 3 $\tau\text{o}\tilde{\nu}\text{t}\text{o} \mu\text{e}\tilde{\nu} \gamma\tilde{\alpha}\text{r}$, $\kai \text{e}\tilde{\nu}\text{an} \kappa\text{r}\text{a}\text{t}\text{h}\text{o}\text{w}\text{a}\text{s}\text{u}\text{m}\text{i}$, $\delta\mu\text{o}\text{i}\text{w}\text{s}$ $\delta\text{r}\text{a}\text{p}\text{o}\text{n}\text{o}\text{v}\text{u}\text{n}\text{i}$ — $\tau\text{o} \delta\text{e} \pi\text{r}\text{a}\text{c}\text{a}\text{n}\text{t}\text{w}\text{o}\text{n}\text{.}$ $\text{e}\tilde{\nu} \tau\text{o} \varepsilon\text{i}\text{k}\text{o}\text{t}\text{o}\text{s} \mathring{\text{a}}$ $\beta\text{o}\text{u}\text{n}\text{l}\text{o}\text{m}\text{e}\text{b}\text{a}$ $\tau\text{o}\tilde{\nu}\text{s}\text{o}\text{d}\text{e} \tau\text{e} \kappa\text{o}\text{d}\text{a}\text{s}\text{t}\text{h}\text{r}\text{v}\text{a}\text{i}$ $\kai \tau\text{y} \pi\text{a}\text{s}\text{y}$ $\Sigma\text{i}\text{k}\text{e}\text{l}\text{a}\text{i}\text{a} \kappa\text{a}\text{r}\text{t}\text{o}\text{m}\text{e}\text{n}\text{y}$ $\kai \pi\text{r}\text{i}\text{n} \text{\text{e}\text{l}\text{e}\text{u}\text{v}\text{e}\text{r}\text{i}\text{a}\text{n}\text{v}}$ $\beta\text{e}\text{v}\text{a}\text{m}\text{o}\text{t}\text{e}\text{r}\text{u}\text{m}$ $\pi\text{a}\text{r}\text{a}\text{d}\text{o}\text{v}\text{v}\text{a}\text{i}$, $\kappa\text{a}\text{l}\text{o}\text{s} \mathring{\text{o}} \mathring{\text{a}\text{g}\text{y}\text{o}\text{n}}$, Dr. Holden wrongly explains 'πραξάντων . . . $\mathring{\text{a}}$ βουλόμεθα, sc. αὐτὸν πρᾶξαι', following Krüger. I fancy πραξάντων and τούσδε do not apply to the same persons, and recent editors rightly supply $\text{\text{h}\text{m}\text{a}\text{w}}$ to πραξάντων. Then $\kappa\text{a}\text{l}\text{o}\text{s} \mathring{\text{o}} \mathring{\text{a}\text{g}\text{y}\text{o}\text{n}}$ is, as usual, construed as if the sentence involved a slight anacoluthon; for, as Classen says, $\kappa\text{a}\text{l}\text{o}\text{s} \mathring{\text{a}\text{g}\text{y}\text{o}\text{n}}$ only would be expected. But is it certain that $\tau\text{o} \dots \tau\text{e} \dots \kappa\text{o}\text{d}\text{a}\text{s}\text{t}\text{h}\text{r}\text{v}\text{a}\text{i}$ $\kai \pi\text{a}\text{r}\text{a}\text{d}\text{o}\text{v}\text{v}\text{a}\text{i}$ is the subject of the sentence? We might take $\tau\text{o} \delta\text{e}$ alone, ('whereas'), and the infinitives as epexegetic of $\mathring{\text{a}}$, and $\kappa\text{a}\text{l}\text{o}\text{s} \mathring{\text{o}} \mathring{\text{a}\text{g}\text{y}\text{o}\text{n}}$ with πραξάντων ($\text{\text{h}\text{m}\text{a}\text{w}}$), whether the latter be 'possessive' or 'absolute'; translating the whole: 'whereas, if we obtain our object, that is punish our enemies . . . the prize will be a glorious one.' It is a pity that the editor has been induced by 'Stahl and others' to bracket πολὺ πλεῖον in c. 63, 4 $\tau\text{h}\text{s} \text{\text{a}\text{r}\text{c}\text{h}\text{e}\text{s} \text{\text{a}\text{r}\text{c}\text{h}\text{e}\text{s}}$ $\tau\text{h}\text{s} \text{\text{h}\text{m}\text{e}\text{t}\text{e}\text{r}\text{a}\text{s}}$ $\text{o}\text{v}\text{k} \text{\text{e}\text{l}\text{a}\text{s}\text{s}\text{o}\text{v}\text{o}\text{n}}$ $\kata\text{t}\text{a} \tau\text{o} \text{\text{a}\text{f}\text{e}\text{l}\text{e}\text{u}\text{s}\text{t}\text{h}\text{a}\text{v}\text{a}}$, $\text{e}\text{e}\text{s} \tau\text{e} \tau\text{o} \text{\text{f}\text{u}\text{r}\text{b}\text{e}\text{r}\text{e}\text{r}\text{o}\text{n} \text{\text{t}\text{o}\text{v}\text{o}\text{s} \text{\text{u}\text{t}\text{r}\text{c}\text{o}\text{s}\text{o}\text{u}\text{s}}$ $\kai \tau\text{o} \text{\text{a}\text{d}\text{e}\text{e}\text{u}\text{s}\text{t}\text{h}\text{a}\text{v}\text{u}\text{m}\text{[}\text{\text{p}\text{o}\text{l}\text{u}\text{n}\text{ }\text{\text{p}\text{l}\text{e}\text{i}\text{o}\text{n}}\text{]}}$ μετείχετε—thus ruining a fine instance of rhetorical δείνωσις, besides spoiling a chiasmus. Dr. Holden gives no reason; but presumably he considers the words are absurd; but they have been defended by Junghahn. At least the editor has not fallen into the error of stating that $\text{o}\text{v}\text{k} \text{\text{e}\text{l}\text{a}\text{s}\text{s}\text{o}\text{v}\text{o}\text{n}}$ must = πολὺ πλεῖον in Thucydides.

Of the three maps two are printed almost entirely in various shades of blue—a pernicious system which is very exacting to the eyes by artificial light. The map of the Athenian retreat, which is apparently that of Fr. Müller's edition, still gives the

Aula Polyzeli north of the Kakuparis; neither Dr. Holden nor Freeman (*Hist. Sic.* iii. 708) accepts Holm's later opinion (*Top.* 235) that the Aula is S. of the river. The Athenians are, as usual, represented in this edition as marching due south on the fifth day of the retreat. To me this seems doubtful. They were closely followed on this day by the Syracusans, who worried them so much that, after muddling on for half a mile, they were forced to halt in the plain. They had been searching in vain for a gorge that should take them again on to the plateau towards the west from which they had been forced to retreat after the repulse at the Acrean Rock. But in the night (c. 80), Demosthenes proposed to change the direction, and go the opposite way to the route which the enemy were watching. As usual, Demosthenes was first to grasp the situation, and the result of his suggestion was that the army made for the Helorine road, which they reached on the morning of the sixth day. This seems to me to imply that the half mile which represents the progress of the fifth day had been in a generally south-westerly direction, though of course south of the road followed during the first three days. In the night, they turned sharp to the south-east. Prof. Freeman has remarked that the downward path taken by the retreating army to the Helorine road is only conjectural.

The Introduction is a sketch of Sicilian History down to 414 B.C. One passage only appears to me to need further consideration. In describing the double wall which the Athenians built south of the κύκλος Dr. Holden says: 'They first fortified a point on the southern cliff, in the line of their blockading wall.' But Stahl, Holm and Luples, with some reason, doubt this interpretation of vi. 101 (Luples, *Stadt. Syr.* p. 134). It is however proper, to add that Freeman's view (*Hist. Sic.* iii. p. 670) accords with Dr. Holden's. Then no further mention is made of the double wall until we read: 'too much time was spent over that portion of them (i.e. the walls in general) extending across the low ground, which was built at first as a double wall.' Thus that part of the wall extending from the κύκλος itself to the point on the cliff which, according to the view accepted by Dr. Holden, was first fortified before the southern wall was begun, is left unaccounted for. It is indeed difficult to make out from the Introduction why the southern wall from the κύκλος to the κρημνός is marked as

a double wall in Dr. Holden's plan instead of single as in Stahl's and Freeman's. The editor follows Lupus and Fr. Müller; but in this matter he appears to have accepted the plan and to have rejected the arguments on which it is based.

There are one or two inconsistencies which it may be worth while to point out. In the notes to c. 62, 1 ἐβλαπτόμεθα is wrongly explained as meaning 'hampered': but in the index under βλάπτειν, the right meaning, *damno, afficere, nocere* is assigned to the word in this passage. In an enumeration of some of the readings peculiar to M, the MS. is wrongly credited with προμίξαι at c. 22, 1; whereas in the critical notes the right word προμηξαι is given for M. I have already referred to a similar error which occurs in c. 69, 4.

'In the critical Appendix the variants of six different (*sic*) MSS. are given together with the readings of Krüger, Classen, Stahl and Hude, where they differ from my own.' Of course, amid such a mass of material, every editor must choose for himself what he will include in his critical notes. But as the value of a critical Appendix is either educational or nothing, most assuredly the readings of Bekker, after all the founder of the critical study of Thueydides' text, ought to be included. The six MSS. are BCAEFM. I have shown in another article that the editor's new collation of M is an advance on Eggeling's, but is not perfect. The editor is not responsible for much independent textual criticism: he has introduced an alteration of his own into the text of c. 53, 4, where, for ἀντεμηχανήσαντό τε σβεστήρια κωλύματα, he

substitutes ἀντ. σβεστήρια τε <καὶ> κωλύματα, and notes 'videor lucem attulisse loco impedito.' But Sitzler had already inserted καὶ before him, while van Herwerden had still earlier thought of the same plan, but rejected it because Pollux i. 168 gives σβεστήρια κωλύματα, apparently from this passage.

The volume closes with another of those triple indexes for which Dr. Holden's editions are justly esteemed. In the Greek Index, 'the Numerals suffixed to words denote respectively:—1 words that occur only once in Thuc., 2 Ionic words, 3 poetical words.' This is excellent, though the numbers are wanting to a few words, such as ἀδόνασία, αἰγαλός (omitted), δικαῶ=δξιο, ἔνμφρεσθαι=accidere, πρότερον ἢ with subj., προφέρειν=προέχειν, φονεύειν. But, on the whole, Dr. Holden merits the thanks of teachers for his work. His, the latest edition in English, is also, I believe, the best. It is more complete than Prof. Forster Smith's excellent book, and of course follows Classen less exclusively; and it is printed on better paper. But a protest must be raised against one disfigurement in the printing. If the Cambridge University Press cannot place good head and tail pieces in school books, it would be far better to omit them altogether. From a press which is to help to educate the top forms of schools nothing should be issued which is either mean in design or bad in execution; and the head and tail pieces in this book have both faults in an acute form.

E. C. MARCHANT.

MACKAIL'S GREEK ANTHOLOGY.

Select Epigrams from the Greek Anthology, edited with a revised text introduction and notes by J. W. MACKAIL, Fellow of Balliol College, Oxford. London: Longmans Green & Co. 1890. 8vo. pp. ix 403.

The Greek Anthology has never failed to find lovers even among those who have no very deep or familiar knowledge of the language; but the bulk of it, with its large proportion of worthless writing, must have baffled many who would gladly have profited by the existence of a good selection. It is

for the benefit of such readers chiefly that this book seems to have been designed, and for their sake especially it should be welcomed.

Of over 5000 poems in this kind that we possess Mr. Mackail gives altogether 489, conveniently dividing them into twelve sections under such headings as *Love, Prayers and Dedications, Epitaphs, Beauty, the Human Comedy, Death and Life*. The selection is judicious, and is accompanied by a translation, notes, indices and an elaborate introductory essay. Doubtless it is to this last that Mr. Mackail himself attaches most

value. Not only does he give a complete and very readable account of the *Anthology* as we possess it, but from an analysis of the various epigrams existing here and elsewhere he has inferred the inner life and spirit of their times in a manner both attractive and enlightening. In the last paragraph of this essay is expressed a view which, though Mr. Mackail evidently feels it strongly, seems to me to be narrow and unwise; I could wish that the whole passage might be cancelled. But as a whole it is an admirable piece of work. The Biographical Index is far from being merely a transcript from Jacobs; and another index (since Mr. Mackail has of course adopted a numbering of his own) will enable me presently without inconvenience to refer to epigrams by their usual description.

Though this is avowedly not a critical edition, Mr. Mackail has in several places introduced new readings of his own, of which the most considerable appear to be: in *Anth. Pal.* v. 113

'Ηράσθης πλουτῶν, Σωσίκρατες· ἀλλὰ πέντης ὁν
οὐκέτ' ἔρας· λιμὸς φάρμακον οἶον ἔχει.'

the passive *ἔρα* for *ἔρας*. But in Eur. *fr.* 322 οὐδεὶς προσαττὸν βίοτον ἡράσθη βροτῶν, which Mr. Mackail compares for the passive, *ἡράσθη* is active, the sense being as Eur. *fr.* 895 ἐν πλησμοῇ τοι Κύπρις ἐν πεινῶντι δ' οὐ and Crates *fr.* 17 ἔρωτα πανεὶ λιμὸς κ.τ.λ., on which, if *ἔρα* is right, we have here a play. See Leutsch on *Apostolius* iv. 58.

In *A.P.* v. 163 καὶ <τὸ> δύσιοστον. In vi. 209 ὑμφροσύνη. In vi. 268 ἥτε. εὐθυμῆι in an epigram of Theaetetus (Diog. Laert. iv. 25), for which Mr. Mackail writes εὐφροσύνη as having about the same sense, was certainly here, as often elsewhere, the explanatory adscript to that word.

There are a few places where better variants or conjectures ought to have been adopted, as 'Αλκμήρη in v. 172, ἀ μὴ θέμις in xii. 141, ἀγγέλλειν or ἀγγέλαι in vii. 249, φωνεῖντ' ἐπὶ τύμβῳ in v. 215.

Of the notes the historical are the best, but in general they are sufficient. Mr. Mackail has rightly chosen not to burden his book with too copious annotation, but there are some places where a little more explanation is desirable. For example, on v. 190 the reader should be told that there is a reference (as Jacobs pointed out) to the *Τρυφερά* of v. 154. In xi. 255 (though it is quite rightly translated) the play on the uses of *ξύλων* and *λίθων* might be noticed. In the epigram of Erinna (*A.P.* vii. 712) Mr. Mackail's remark on Bergk's conjecture

shows that he has not understood it. *τὰν παιδί* is meant to be relative. I do not think it right to say that in xii. 131

ἢ τὸν ἔραστὴν
οὐδέποτ' οἰκείον ὥστε ἀπὸ προθύρων

'οἰκείος has here its primary sense "of the house." It is a mistake to say of *κτέαρα* (p. 356) that it is 'used principally of possessions in cattle.'

There is a good note on the meaning of *βύροντα* in vi. 33.

Mr. Mackail was already practised as a translator in prose, and his renderings, while they please by their style, will also be useful because of their close fidelity. Such examples as the following could hardly be bettered:

v. 130. Why so woe-begone? and why, Philaeis, these reckless tearings of hair and suffusion of showerful eyes? hast thou seen thy lover with another on his bosom? tell me; we know charms for grief. Thou weepest and sayest no: vainly dost thou essay to deny; the eyes are more trustworthy than the tongue.

ix. 107. They call me the little one, and say that I cannot go straight and fearless on a prosperous voyage like ships that sail out to sea; and I deny it not; I am a little boat, but to the sea all is equal; fortune, not size, makes the difference. Let another have the advantage in rudders; for some put their confidence in this and some in that, but may my salvation be of God.

Translation, however, to be true, requires the nicest appreciation of both languages; and there are cases where Mr. Mackail betrays insufficient apprehension of Greek idiom. Owing to this he has not always been successful in resisting a tendency, most common as it is most natural, to translate too curiously—to give more than the equal value for a word or phrase. Thus (to show my meaning by illustrations) the usual ἀλλὰ prefacing a wish we find rendered regularly by 'but'; as in vi. 55

ἀλλὰ δέχεσθε
ἀντ' αὐτᾶς πακτάν, ἀντ' ἔρεθεν τὸ μέλι.

'but accept for her the cheese, . . .' So in vi. 209, vii. 398, 476, 555, ix. 649. This is not an English idiom; we say either 'O accept' or merely 'accept thou.' Similarly v. 190

ποι φέρομαι; πάντη δὲ φρενῶν οἴκας ἀφεῖται
'whither am I borne? and the rudders of my spirit are quite cast loose.' In v. 174

εἴθ' ἐπὶ σοὶ νῦν
ἀπτερος εἰσήγειν ὑπνος κ.τ.λ.

'would that I had come to thee even now'

etc. is too servile; we can say only 'Oh to come.' vii. 195

ἀκρίς, . . ἐγκροίουσα φίλοις ποσσὶ λάλους πτέρυγας

where *φίλοις* is merely 'thine own' after the Epic use, as *e.g.* *φίλοις μαζούς* in *A.P.* ix. 362, is rendered 'with thy dear feet,' which represents no English phrase. In v. 214

Σφαιριστάν τὸν Ἐρωτα τρέφω

rendered 'Love who feeds on me is a ball-player,' *τρέφω* is merely 'I keep.' xii. 72

καῦτὸς Ἐρωτος ἐλκος ἔχων

though for v. 225 ἐλκος ἔχω τὸν Ἐρωτα we find 'I have a wound of love' (rather 'Love in me is a wound'), is rendered 'even myself I wear Love's wound.' In these places Mr. Mackail has committed the fault of over-translation. There are several other inaccuracies of rendering: v. 69

οπόταν . . αἰνῆται Κύπρις ἡπ' ἀμφοτέρων

('the tale of love is told by both') should be 'love is approved' as Pind. *P.* iii. 13 ἀλλοι αἰνητεν γάρον. In Plato's epigram v. 78

Τὴν ψυχήν, Ἀγάθωνα φιλῶν, ἐπὶ χειλεσιν ἔσχον ('I had my soul upon my lips') *ἔσχον* is rather 'I held, checked.' I do not understand what is intended by the translation of the difficult epigram v. 130

καὶ τὸ φίλαμα

μναμόσσνον ψυχρᾶ θύλπτε' ἐν εἰκασίᾳ

'and is her memorial kiss warm upon my cold picture?' How 'memorial'? And does she really kiss a picture, like the painter in *Aristaenetus*? Surely, if the conjecture *εἰκασίᾳ* is sound, the meaning must be 'and in memory is my kiss still warm in cold imagination?' In v. 149

ἢ δ' ἐτύμως ὄντος κεχαρισμένον ἄννονεν ἔργον

'surely the man did a gracious deed' misses the force of *ἐτύμως* marking the play on *χάρις*. In v. 177 'this boy' hardly suggests the proclamation. v. 178

πωλεῖσθω καὶ ματρὸς ἔτ' ἐν κόλποισι καθεῖσθων means, I think, not 'even while he is yet asleep on his mother's bosom,' but rather 'while he is yet a sleeper on his mother's breast.' Cf. *e.g.* vi. 266

τάνδε παρὰ προθύροις τὰν Ἀρτεμιν Ἀγελοχεια, ἔτ' ἐν πατρὸς μένοντα παρθένος δόμοις, ἐσπατο.

In v. 247

Παρμενὶς οὐκ ἔργω τὸ μὲν οὔνομα καλὸν ἀκούσας ὠστάμην

'Constantia, nay verily!' loses the point: οὐκ ἔργω (εἶ) implies ἀλλὰ τῷ ὀνόματι μόνον.

v. 261 τὴν χάριν ἣν ἔλαβεν ('the grace that it had') should be 'the grace it had received.' vii. 417

οὐ σὸν Μούσαις Μελέαγρος

πρῶτα Μενιππείας συντροχάσας Χάρισυ

is translated 'I Meleager, the companion of the Muses, first of all who have run side by side with the Graces of Menippus' (the note too has 'οὐ σὸν Μούσαις, "the companion of the Muses": from Theocr. vii. 12') as though the Greek were οὐ σὸν Μούσαις Μελέαγρος, οὐ πρῶτος . . , and in the same epigram.

γῆρως γὰρ γείτων ἐγγύθεν Ἀττεω

'since old age is death's near neighbour.' vii. 419

ἀλλ' εἰ μὲν Σύρος ἐσσί, σαλάμ, εἰ δ' οὖν σύ γε Φῶνιξ
ναιδός, εἰ δ' Ἐλλην, χαῖρε, τὸ δ' αὐτὸ φράσον.

'But if thou art a Syrian, say *Salam*, and if a Phoenician, *Naidios*, and if a Greek, *Hail*; they are the same.' In vii. 696 ἀνάρστον is omitted in the English. In ix. 82 ἐς δὲ κόλυμβον = ἐς τὸ κόλυμβᾶν 'for the dive,' not 'at the dive.' The translation of xi. 114 seems to represent a reading *τελεῖ* for *λέγει*. xii. 72 ἡδη μὲν γλυκὺς ὄρθρος ('Now grey dawn is sweet') should be 'By this 'tis sweet dawn' (*ἀμέρα καὶ δῆ*). In xii. 117

χάκόσα μοι προσέφη χάκόσ' ἐπινθάνετο

('all she said to me, and all that she asked me of ') *ἐπινθάνετο* is 'all that she learnt,' i.e. 'all that I said to her.'

These are blemishes which may easily be amended on revision. I should not have been so careful to point them out had I not felt that there was ample reason why this should not be the last edition of a praiseworthy and valuable book.

WALTER HEADLAM.

SUSEMILH'S ALEXANDRIAN LITERATURE.

Geschichte des griechischen Litteratur in der Alexandrinerzeit von FRANZ SUSEMILH. 2 vols. 8vo. 1891—1892.

A COMPLETE and connected history of Greek Literature from the death of Alexander to the reign of Augustus has long been a crying want. There is always much to be found in Bernhardy, but rich additional material for such a work has accumulated since his time, both from the discovery of inscriptions and other monuments, and the labour of individual editors. The task is an alarming one, requiring a rare combination of learning, accurate judgment, and constructive talent. The subject is so multifarious and the remains so fragmentary, the centres of intellectual energy so numerous and so wide apart, the regions into which enquiry had penetrated were so extensive and so diverse, that something like genius is required to give unity to a comprehensive survey. Dr. Susemihl speaks with becoming modesty of others more competent than himself, who have left undone what he has attempted. If such persons exist, they will be the first to acknowledge that he has successfully rendered a difficult and important service. The plan of his work resembles that of Zeller's great *History of Greek Philosophy*, to which, in one department at least, he is necessarily under deep obligations. A readable and well-written text is furnished with elaborate and learned notes, containing full references to the authorities for each statement. Many nice points, historical or critical, are treated with lucidity and discrimination. The uncertainty which often remains is candidly acknowledged. The fortunes of the chief writers and their works are traced with a fulness which is extremely satisfactory. I may refer especially to the account of the writings of Callimachus in notes 106 and 107 on pp. 370 ff. of vol. I. The writer gracefully acknowledges the labours in the same field of his colleague von Wilamowitz-Moellendorf. Frequent reference is also naturally made to the author's own Platonic and Aristotelian labours.

After a short historical survey of the period, Dr. Susemihl deals separately with the philosophers, poets, grammarians, biographers, art critics, historians, geographers, mathematicians, mythographers, writers on medicine, husbandry and natural history of the Alexandrian epoch. The poets and

grammarians are hard to separate, for the poetry of one century passed gradually into the philology of the succeeding one. Zenodotus wrote verses, and Callimachus was the teacher of Aristophanes of Byzantium, and had almost equalled the amazing industry which his pupil afterwards displayed. That the reputed author of the saying $\muέγα βιβλίον μέγα κακόν$ should have published 800 volumes, of which only a few 'hymns,' rendered frigid by court flattery, have come down to justify the reputation which his elegies had earned, is a curious example of the inconstancy of literary tradition.

It is much to Dr. Susemihl's credit that so many writers whose works have all but perished should live before us in his pages with the distinctness of individuality; and that the filiation of Alexandrian learning, from master to pupil successively, should be so clearly evident. The famous literary feud between Callimachus and Apollonius Rhodius on the theme which haunts each age of decadence, 'Is great poetry any longer possible?' is instructively handled. The foundation of the great libraries, with their relation to literary forgeries, is also touched upon with acuteness and judgment. The greatness of Euclid and Archimedes, and of the chief promoters of medical science, is strongly and succinctly marked. Many scattered observations deserve to be commended, as for example that Euhemerism naturally found favour in an age which began to deify its rulers; and that the later Comedy, including the burlesque of Tragedy, was probably moulded, to some extent, by a respect for the precepts of Aristotle. This last remark would no doubt equally apply to such pieces of make-work as the 'tragedies' of Lycophron.

Those were right upon the whole who contended that in the Alexandrian age the time for great poetry was passed. The *Argonautica* is long and delightful in its way, but about as much an epic as *Helen of Troy*. The learned poets of the third century judiciously turned their attention to the Idyll, the Elegy, the Epigram, the Didactic Poem, or the occasional Ode, which had often more of a rhetorical than a lyrical character. The masters of the New Comedy, Menander and Philemon, should rather be reckoned as continuers of the Attic tradition. (By the by, Dr. Susemihl might have mentioned that the base for the portrait statue of Menander,

with his name upon it, is still in evidence at Athens.) Yet this later growth of Greek poetry possessed enough of original charm to provoke the emulation of Catullus, and even of Virgil. Not to speak of Menander, the disappearance of whose plays is an inestimable loss, or of Theocritus, of whom enough remains to enable after-times to appreciate him; much Alexandrian poetry that has perished, and which in its first freshness contributed so much to the culture of Rome, had no doubt on a larger scale the incomparable beauty of the best things in the *Anthology*. Dr. Susemihl gives a brief but interesting account of Herodas, whom he places in point of time between Theocritus and Moschus. Had the papyrus-fragments of him appeared before the completion of vol. I., the author would probably have suppressed his speculative theory assigning him a Sicilian or Italian origin: he has in fact withdrawn it in the Appendix to vol. II., p. 702, where the fatherland of this 'Coan Corney Grain' is clearly acknowledged, and his time is referred to the period from the later years of Ptolemy Philadelphus to the reign of Euergetes I. But—so hard is it to be 'up to date'—the writer had not yet seen the inscription which fixes the spelling as 'Herodas.'

In the second century B.C. the already diminished vein of poesy was further attenuated, while the pursuit of learning to which the impulse had been given by Zenodotus and his immediate successors was carried forward in all directions with the utmost industry and ardour. This great movement, associated in the first instance with the foundation of the two libraries at Alexandria and that at Pergamos, was continued in uninterrupted succession by Callimachus, Eratosthenes (the most many-sided of cultured men), Aristophanes of Byzantium, Leogoras, Callistratus, and Aristarchus who carried learning to the height, and whose tradition was continued to a still later period by Dionysius Thrax, Didymus and others. Meanwhile a rival school of literary criticism was flourishing at Pergamos, historical investigation was eagerly pursued, and mathematics and medicine were prosecuted with equal originality and erudition. Whether or not, as Dr. Susemihl maintains, Callimachus was for a time the prefect of the Museum library, it is impossible to think without envy and admiration of the productive industry not unaccompanied with genius of himself and his successors. Had their works been preserved entire, however often later ages might have

to disable their judgment, the facts which they had collected would have been invaluable.

On the Homeric question, which of course enters into the scope of his work, Dr. Susemihl speaks with some uncertainty. He does not know whether to believe or not in the recension of Pisistratus; and in his general statements he relies largely on Ludwig and v. Wilamowitz-Moellendorf.

As the centuries advance, the subject broadens, and the comprehensiveness of the work becomes yet more apparent. The influence of the Pergamene philologists on the shaping of Roman legend and on Roman rhetoric and criticism,—the industry of the Mythographers and the romance writers, Panaetius and the modification of Stoicism, the Eclectics and Epicureans, Aenesidemus and Scepticism, Polybius and Poseidonius, Alexander Polyhistor, and a score or two of other historians ending with Juba the 2nd of Mauretania (Massinissa's offspring)—all these make a *farrago* of topics seemingly incoherent, yet falling legitimately within Dr. Susemihl's scope and treated by him with impartial fulness. Nay more, to complete the survey of this 'strange-disposed time,' he has included in his book a sketch of Jewish Hellenism, the Septuagint, the Apocryphal books, the Wisdom of Solomon and the rest, so that Apollodorus and Aristobulus, Philodemus and the son of Sirach, Meleager and the Hebrew Sibyl, find themselves together without clashing within the limits of the same volume.

Those who desiderate a more exhaustive treatment of any one of these, will at least find here the references which they require. And the same may be said of two subjects which are inevitably treated with condensation and brevity. The oratory and rhetoric of the whole period, including the spurious orations and epistles, is compressed into one chapter—the 35th,—and the rich and varied literature of which a fragment only remains to us in the Palatine Anthology, is overtaken in less than sixty pages forming the 36th chapter of the work. This may seem little more than a list of names, but the long note beginning on page 566 of vol. II. appears to contain as complete an account as has yet been written of the eventful history of a collection which can never lose its charm.

Amongst other references, including one to Mr. Ellis's articles in the *Cambridge Journal of Philology*, some allusion to the writings of Mr. J. A. Symonds and Mr. Mackail might perhaps have been looked for, even in a German book.

The index, of fifty-five pages, by A. Brunk, was especially needful in a work of such heterogeneous contents: it would have been a further assistance to the reader if some chronological indications could have been added, either in the margin or on the headings of each page. Perhaps the uncertainty of many of the dates may have interfered with this.

In closing the second volume it occurs to one to ask whether the inferior limit of the period is not somewhat arbitrarily defined.

It is tantalizing to stop short without reading something about Dionysius of Halicarnassus, or Plutarch, or Pausanias, or Philostratus, or Lucian. A third volume, completing the series, and including Origen, would be a satisfactory, if a formidable, addition.

The work as it is will be heartily welcomed by all scholars, both as an interesting 'Lesebuch' and as a mine of reference that will not soon lose its value.

L. CAMPBELL.

Familiar Studies in Homer, by AGNES M. CLERKE. London, Longmans and Co. 1892.

Miss Clerke does not undertake to do more in her little volume than to illustrate for the 'general reading public' the latest results of Homeric archaeology. This she has done in a chatty and 'popular' way, which makes the eleven chapters at once pleasant and instructive. 'The schoolboy reading fluently in the original' the Homeric poems, and taking the same delight in them that his little brothers and sisters take in Cinderella and Jack the Giant-killer, exists more largely in the imagination of the authoress than in real life; but the wide and growing interest felt generally in Homeric antiquity is an indisputable fact. Miss Clerke is fervent 'Chorizont.' While she assigns both poems to the interval between the Trojan war and the Dorian invasion, she sees in the Homer of the *Iliad* a Thessalian, and in the Homer of the much later *Odyssey* a Peloponnesian who had travelled widely. But in emphasising the differences which characterise the two poems she does not always give sufficient weight to the difference of the circumstances which the poems describe; and this weakens the value of some of the arguments drawn from the irreconcilability of the position of the dog, the horse, and the goose in the *Iliad* and the *Odyssey*. The chapter on Homeric astronomy, where Miss Clerke is on familiar ground, is full of information; and, indeed, it would be interesting to see a star-map of the Homeric sky, to enable us to ascertain the amount of change of position which the precession of the equinoxes may have produced since the supposed date of the poems.

In the chapter on Homeric meals occurs a passage which suggests a misinterpretation of the Greek. Speaking of angling as pursued by Homeric fishermen, Miss Clerke says (p. 183): 'Its meditative pleasure made no appeal to them, and they were very sensible of the unsatisfied gastronomic craving which survived the utmost success in its pursuit.' This may be supposed to mean, in plain English, that the men soon felt hungry after a large fish-dinner. The passage to which reference is made is doubtless *Od.* 12. 330 foll., where the starving men angle with hooks for 'fish and birds, or anything that came to hand,' *ἔτειπε δὲ γαστέρα λιώσ.* The last words, introduced by the paratactic δέ, do not imply that they found the food unsatisfying (there was poultry of a kind, as well as fish!), but they give the reason why the men went fishing; because they were starving, and could get nothing better. Miss Clerke follows Sprengel in identifying Helen's anodyne with opium, and decides on garlic as the

equivalent for *moly*: but the white flower and black root, and the absence of any allusion to the pungent smell, seem to incline the balance in favour of hellebore, the famous antidote for madness. The chapter on amber, ivory and cyanus will be found to be particularly interesting. A conscientious desire to be 'popular' sometimes leads a writer into faults of style; and to this desire we must refer such portentous phrases as 'windy origin,' 'porcine proclivities,' 'adipose perfection,' 'decade of consumed sparrows,' 'equine co-operation,' and the like, which are grotesque without being effective. But the book will well repay reading, and is quite 'up to date.'

The Plays of Euripides, translated into English prose from the text of Paley by EDWARD P. COLE RIDGE, B.A. 2 vols. London: George Bell and Sons. 1891.

A NEW prose translation in an agreeable form of all the plays of Euripides was a work much needed, and the present should be found very serviceable. Though Mr. Coleridge has mainly followed Paley's text, he has also consulted other editions, and in marginal notes is given a careful record of readings adopted, suspected or proposed. The translation is quite readable, in spite of a tendency, the viciousness of which Mr. Coleridge does not seem to have appreciated, to cast his words into iambic rhythms. The result for those who wish to read the translation consecutively is constantly somewhat irritating; but this is the only noticeable fault. The inaccuracies appear to be few and slight, and the language in general is neither too prosaic nor too florid; it is never ridiculous. If Mr. Coleridge is not weary of such work, it is to be hoped that he may give us in the same series a new translation of the plays of Aeschylus.

W. H.

Demosthenes, Ausgewählte Reden; für den Schulgebrauch herausgegeben, von DR. KARL WOTKE. Mit einer Karte und einem Titelbild. Dritte vermehrte Auflage. Leipzig. Freytag. 1892. pp. xxix. 126. 1 Mk.

THE previous editions of this book have been exhaustively reviewed by Dr. Sandys (see *Classical Review* i. p. 271; iii. p. 369), so that it is only necessary here to mention the characteristic features of the work in its present form. A short history of Attic oratory up to the time of Demosthenes precedes the biographical sketch, and an appendix is added on the Athenian *βουλὴ* and *ἐκκλησία*. On the other hand Dr. Wotke has omitted the chronological table which appeared in the first edition and which is almost as necessary for young students

as the map, and also the preface and appendix on the text. There is thus no indication that the text is in the main that of Rosenberg, nor is there anything to show where other readings have been preferred. In *Phil.* iii. § 68 (70) we now find Cobet's *ἐρωτήσας* adopted as recommended by Dr. Sandys, instead of *ἐρωτήσων*, the reading of all MSS., which appeared in the first edition; cf. Heslop's note *ad loc.* and Goodwin's *Moods and Tenses* § 216. But of the misprints pointed out by Dr. Sandys the following are still uncorrected: *Chers.* § 61 *προσήκεν* misprint for *προσήκει*; *Phil.* iii. § 26 *οὖθ'* twice for *οὖθ'*; in the list of names *Φερά* still appears as *Φερά*; *Θεσπιαί* is still omitted; there is still some confusion about Erythrae, the Asiatic town of that name being indicated in the map-index, while in the list of names *Ἐρυθραῖοι Chers.* 24 is still referred to Boeotian *Ἐρυθραῖ* (or as Dr. Wotke prefers to write it *Ἐρύθραῖ*); and the *Kāp* of the *de Pace* § 25 is still identified with Mausolus. Besides these the present reviewer has noticed: *Phil.* § ii. 33 *γλύκεται* misprint for *γίγνεται*; *Chers.* § 12 omission of comma after *οὐλαί*; *ib.* § 65 *οὐκ* for *οὐε*.

But in spite of these slight blemishes the edition is a practical and useful one, and should not be ignored in England where the latest editors of these speeches have been content to reprint the text of Bekker. Indeed with some additions the book would be useful to more advanced students. But for this purpose the authorities, both ancient and modern, should be given, in foot-notes or otherwise, for every

statement made in the biographical sketch of Demosthenes and in the brief introductions to the speeches, and the latter should be made more complete. Thus the strange mistake of Dionysius *ad Ann.* 4 about the *First Philippic* should be mentioned; and, although both Schaefer (*Dem. u. s. Zeit* ii. p. 148) and Blass (*Att. Bored.* iii. 1. p. 279) arrange the *Olynthiacs*, as Dr. Wotke has done, in the order i. ii. iii., we should like to see some criticism not only of Grote's view² that *Ol.* ii. preceded *Ol.* i. but of Unger's that *Ol.* i. was written in B.C. 352 and so before *Phil.* i. (*Zeitfolge der 4 ersten demosth. Reden gegen Philipp* in the *Sitzb. d. b. Ak.* 1880 pp. 273 *sqq.*). Again, in the introduction to the *de Pace* there is no reference to the view of ancient critics that the oration in its present form was written only, not spoken (Peter, *Zeittafeln*, 6 p. 125 and the authorities there cited), and no mention of the *Philippus* of Isocrates published in the same year, 346 B.C. Lastly, the Greek *hypotheses* might with advantage be printed before the orations and a note added to the *Titelbild* informing young students that the hands and roll are a restoration; on this point reference may be made to Mr. W. C. Perry's *Descriptive Catalogue of Casts from the Antique in the South Kensington Museum*, pp. 107 *sqq.* and to the *Classical Review* ii. p. 32.

H. CLARKE.

¹ On the varying accentuation of this word see Eustath. 267, 6 cited by Chandler.

² For a recent German estimate of Grote's *History* see R. Pöhlmann's *Grundzüge der politischen Geschichte Griechenlands* in Müller's *Handbuch*, iii. pp. 357 *sqq.*

ORPHEUS TRAVESTIED.

WHEN Orpheus went down to the regions below,
Which no man is permitted to see,
He tuned up his lyre, as old histories show,
To set his Eurydice free.
All Hell was astonished, a person so wise
So rashly should venture his life
In the regions of death; but conceive their surprise,
When they learned that he came for his wife!
To find out a punishment meet for his fault,
Old Pluto long puzzled his brain,
"But down here we've no torments sufficient," he thought,
So he gave him his wife back again.
But melody softened the gloomy god's heart,
And, pleased with his playing so well,
He took her again in reward of his art,
Such power has music in Hell!

ORPHEUS *ορτυρικῶς*.

QUANDO Tartareas Orpheus devenit ad Umbras,
Quaeque hominum nulli visere regna licet,
Compositum citharae (veterum stat fabula)
chordas,
Ut numerosa suam solveret Eurydicen.
Tam temere infernis caput obiectare periclis,
Tam bene cordatum Styx stupet ima
virum:
Sed quando didicere viam pro coniuge coep-
tam,
Quanto plus Umbras obstupuisse putas?
Dis pater omne genus poenarum corde re-
volvens,
"Saxum," ait, "his ausis est leviorque
rota:
"Infirmi ad tormenta sumus pro crimine
Manes,
"Ni reddam uxorem!" Solvit et Eury-
dicen.
Dira sed ad numeros mansuescant corda
tyranni,
Gratiaque artifici, tam bene lusit, erat:
Additaque in poenas mox pro mercede re-
sumpta est
(Tantum apud Infernos ars valet) Eury-
dice.

HENRY HAYMAN, D.D.

ΒΙΟΥ ΟΛΟΦΥΡΣΙΣ.

φεῦ φεῦ, νεάζων ἄλλος ἄλλ' ἀμαρτάνει.
ἀδρούμενον δὲ δυσπαλής τρύχει πόνος.
τρίτον δὲ πῆμα, πρέσβυς ὃν τὰ πρὶν ποθεῖ.

CHARLES H. KEENE.

CORRESPONDENCE.

To the EDITOR of the CLASSICAL REVIEW.

DEAR SIR.—In reference to the note you forwarded to me discussing the metre of the third line of the Alcaic stanza, I should say that the true metre is trochaic

- - - - -

The weight however thrown on to the line in the stanza induced Horace absolutely to abolish the central short syllable, and to make the centre of the line strong and weighty with a big word, *e.g.*

audita Musarum sacerdos
elari Giganteo triumpho
fastidit umbrosamque ripam

This abolition of the central short syllable which is common in Greek alters the whole character of the line, and especially makes Horace object to such marked trochaic endings as would be produced by (1) the use of two dissyllables or (2) a quadrisyllable.

In 317 stanzas only three have the third line ending with a quadrisyllable and only eight ending with two dissyllables. Of these eleven exceptions *none* occur in the third or fourth books. Moreover of the eight cases of two dissyllables *five* are very peculiar, namely where the first of two dissyllables is repeated as first word of the fourth line, as

ponés iāmīs sīve flāmīa
sīve mari

where the peculiar emphasis on the repeated word seems to account for the exception.

I think Horace's rule is clear, viz. to make the third line of few and weighty words and to avoid the marked trochaic endings, such as

pōsse rīvos
or viperino.

Put side by side

Clari Giganteo triumpho

and Alceaeus'

μέλιχρον, αὐτὰρ ἀμφὶ κόρσα

and you will see the difference which Horace has introduced.

Whether the line begins with a word of two or three syllables seems to me a matter of pure accident. Of course if it begins with a dissyllable you must have such a word as *Giganteo* or *triumphata* to follow or else a trisyllable followed by such an ending as

(Tactu leonem), quem cruenta.

If you have to avoid two dissyllables at the end you have very little choice at the beginning, and I think the figures I have given show that Horace detests two dissyllables at the end. There are only *three* simple cases in 317 stanzas and of these *one* (pronos relabi posse rivos) is for special effect.

T. E. PAGE.

NOTES.

CIC. *Ep. ad Fam.* x. 18. 2.—*Sciebam enim, etsi* cautius illud erat consilium, *expectare me ad Isaram,* dum Brutus traiceret exercitum, *et cum collega consentiente, sicut milites faciunt,* hostibus obviam ire, tamen, *si quid Lepidus bene sentiens detrimenti cepisset, hoc omne assignatum iri aut pertinaciae meae aut timori videbam etc.*

The correction *etsi* for *et* of Lambinus etc. results in what Orelli terms an 'ἀνακλόνθον Plancus invidendum.' If it were worth while to deprive Plancus of this enviable figure of speech, where the sense is quite clear (*videbam* merely taking up *sciebam* which he had forgotten writing or dictating), it would be easy to read *esse* instead of *etsi* and omit *erat*. But

it is about the words italicised that the commentators raise *fluctus in simpulo*. Orelli says 'ceterum valde inepta v. *sicut milites faciunt*, ubi, ut fit, ea iungas cum v. *hostibus obviam ire*, explicesque "sicut solent" velut "sicut deceat milites hostibus fortiter ire" quis negat? Sed longe alium habent significatum, scil. "uti consentimus ego et Brutus pariter eius meique milites inter se consentimus pro libertate propaganda, proculque absunt a Lepidanorum varietate atque infidelitate." Few will agree with the great scholar that any such sense as this can be found in the words as they stand. But if they are 'valde inepta' when joined with what follows, why not join them with what precedes? 'To wait for Brutus and attack the foe, with the loyal co-operation of my colleague (*shoulder to shoulder*) in *soldier fashion* etc.' is certainly not an inept expression. Plancus was writing from Gaul, and in Caesar *B.G.* iii. 22 we read of Gallic *soldurii*, who went, as Shakespeare puts it, 'sworn brothers to war.' That the custom was not unknown to the Romans may be seen from Livy ix. 39 and x. 38, Cic. *pro Mil.* § 55, and Tac. *H.* i. 17. Athenaeus vi. 249 and Plut. *Sertor.* xiv. also allude to it. Where the reading of the MSS. gives such good sense as this, why alter it?

P. SANDFORD.

Queen's College, Galway.

* *

Kataσβῶσαι HEROD. v. 39.—Probably few purely classical scholars think it necessary to study a specialist periodical like *Indogermanische Forschungen*. It may therefore be worth while to draw their attention to the fact that the above form receives an exhaustive discussion and defence from Dr. Brugmann in the last number issued (vol. i. p. 591). His argument is this: *σβεσ-* is to be analysed into *σβ-* root and *-εσ-* suffix (cf. *τρ-εσ-*: *τρ-έω*, *ξ-εσ-*: *ξ-έω*) and so *σβ-η-* (cf. *πλ-η-*, *πρ-η-*, &c.). Then just as we frequently find a suffix *-ω-* in exactly the same function as *-η-* (cf. *γν-η-*: *γν-ω-*, *ζ-η-*: *ζ-ω-* &c.) so here we may analyse *σβ-ω-*. Or, on the other hand, it is possible that *kataσβῶσαι* represents *kataσβόησαι* in which case we may suppose that beside *σβ-εσ-* existed *σβ-οσ-* with an alternative form of suffix, in support of which are cited the Hesychian glosses *ζασσον*, *σβέσσον* and *ζασσον*, *σβέσσεις* which are supposed to contain the root-form *zilos-*.

It is scarcely necessary to inform even the unin-

itiated that the harlequin of these transformations is the velar guttural, but they may be pardoned for regarding with some suspicion a *science* which, after laying down as *laws* that the velar guttural becomes a labial before *o*-vowels and a dental before *e*-vowels, is able by its principles to accept recorded forms *zbes-*, *zdos-*, as confirmation of those laws. However so strangely powerful is the attraction which a subtle proof exercises over the greatest minds, that Dr. Brugmann prefers this explanation to his former one. His reason is that *σβω-* is unattested: but he has no difficulty in assuming **σβοο-* to explain *σβεσ-* and **ζεσ-* to explain a doubtful *ζωσ-*.

For my own part, if I were compelled to choose between these explanations, I should prefer the assumption of **σβω-* to Mr. Rutherford's *kataσβέσσαι*, but if I am not mistaken a still simpler explanation of *kataσβῶσαι* will already have occurred to most scholars.

The aorist *τσβεστα* is comparatively speaking isolated. The only aorists which would naturally form with it a mental class (Paul's 'formale gruppe' in its narrowest sense) are *ἡμφίστα*, *ἐκέρεστα*, *ἐστρέπεστα*.¹ The last-named is common in Homer, is found in *Trag.* and *Theoc.* Beside it exists the first aorist *ἐστρωστα*, *Trag.*, *Theoc.*, with meaning, as far as we can judge, absolutely identical, and the use of both stems is continued, as may be seen from Veitch, by later writers. Now, under these circumstances, is it not possible that Herodas or his contemporaries using in daily speech, or at any rate finding in their poetic models, the forms *στρέπται* and *στρώνται* used indifferently should venture on the analogical formation *kataσβῶσται*² as equivalent to *kataσβέσσαι*, and is it not more probable—whether we assign his date to the third century B.C. or agree with Mr. Ellis in placing him after Vergil—that that a form *σβω-* or *σβεσ-* should have come down to him from Indo-European times without having once come to the surface in literature? Homer and post-classical authors demand different treatment in the matter of etymologizing.³

H. D. DARBISSHIRE.

¹ I take these from Krüger § 39, *Taf.* viii. : the first may almost be excluded.

² I need scarcely point to *ἀκήκουντα*, ten lines below.

³ Bücheler's analogy of *πλώσται* lacks a middle term.

ARCHAEOLOGY.

The Inscriptions of Cos, by W. R. PATON and E. L. HICKS. Oxford, Clarendon Press, 1891. Pp. lii. 407.

THIS is a very able and thorough piece of work. Mr. Paton has, in repeated visits, hunted zealously and successfully for inscriptions throughout the length and breadth of Cos. Among his numerous discoveries the most important were two large fragments of the valuable sacrificial calendar, Nos. 37 and 38 of this volume, first pub-

lished from his copies by Mr. Hicks in the *Hellenic Journal* ix. 332 ff. Mention should be made of Nos. 327, 328 and 344, which prove the Haleis and Phryxa (*vulg. Ηύξα*) of Theocritus's Seventh Idyll to have been political divisions (demes). Mr. Paton has furthermore collated anew many already published inscriptions, thus verifying or correcting or adding to the readings of previous editors. But the work before us offers much more than this; it is a complete and well-arranged *Corpus* of all known

Coan inscriptions, with copious commentaries, historical introduction, appendixes, and indexes. So far as I am qualified to judge, the task has been discharged in a masterly manner. Acuteness in the restoration of mutilated texts, extensive familiarity with the relevant literature, and unusual ingenuity in historical hypothesis, combine to render this volume a credit to British scholarship. Possibly Mr. Paton's ingenuity is not always sufficiently balanced by self-criticism. I feel this especially in reading Appendix I. (Theocritus: Was He a Coan?). The life of Theocritus there narrated (p. 359) is, to be sure, avowedly conjectural, but I understand Mr. Paton to feel tolerably sure that the poet's father and mother, Praxagoras and Philinna, were Coans and that he had a step-father Simichidas or Samichidas, a Coan citizen of Orchomenian extraction. But the names Praxagoras and Philinna are too common elsewhere to afford any reasonable support to this view; and as for the Simichidas theory, it rests upon a very doubtful emendation of a scholium, which, on its face at any rate, does not refer to Theocritus at all. Mr. Paton finds confirmation of this Orchomenian step-father in Idyll XVI. 'The poem,' he says, 'must have been written at Orchomenus: the καλλείψω δ' οὐδ' ἵψε in line 108 shows this' (p. 359 note 1). Nay more: 'Theocritus himself testifies to his connexion with Orchomenus in Idyll XVI.' (p. 356 note 4). But surely, considering the antiquity and importance of the worship of the Charites at Orchomenus (Paus. ix. 35, 38), a poet may invoke the Orchomenian Charites and promise not to desert them without being actually in Orchomenus, and much more without having any family connexion with the place.

However, this is small criticism, and the smallness of it is the best tribute I can pay. I could wish that some of the most important inscriptions had been given in facsimile—they are all printed from type—but doubtless Messrs. Paton and Hicks have not decided the matter without due consideration.

F. B. TARRELL.

Elatée. La Ville et Le Temple d'Athena Cranaia; par PIERRE PARIS. (E. Thorin. Paris, 1892.)

THIS monograph on the excavations undertaken in 1883 and 1884 at Eleuta, the site of ancient Elatea in Phocis, and on a hill not far distant where traces exist of the

temple of Athena Cranaia, visited by Pausanias, is a publication of the French School at Athens. Reports were presented during and at the close of the actual excavation by Monsieur Paris; now after seven years comes a complete *résumé* of results.

The justification for so long a delay and so stout a volume as this before us lies in the expediency of exhausting any subject, however unfruitful, and placing every scrap of information on ancient Greek life before archaeologists, in the hope that one out of ten (as Monsieur Paris himself says) may find something to connect with or illustrate his own researches. It must be confessed that in this case the explorer found almost nothing of obvious interest or importance, except an important fragment of the Edict of Diocletian (No. 39 among the inscriptions) already edited in the *Bulletin de Corr. Hell.* for 1885. For the rest, some deeds of enfranchisement, partly known previously, a few public acts of a little Phocian community, and a very interesting Christian inscription, stating that a stone found among the ruins of the Church of the Panaghia, is 'the stone from Cana of Galilee where our Lord Jesus Christ made the water into wine,' make up all that is of any value in the small collection of Greek inscriptions existing on the site of the town or unearthed in the temple of Athena. Concerning the Cana stone an *excursus* by Charles Diehl is reprinted from *B. C. H.* ix., wherein it is maintained that this is the 'Couch of our Lord' seen by the pilgrim, Antoninus of Placentia, in the sixth century at Cana itself, and probably transported to Elatea by some Frankish knight who found it in Constantinople at the time of the Latin conquest. The identification is ingenious and interesting but, resting as it does simply on a *graffito* containing the name Antoninus, of by no means assured antiquity (as Monsieur Paris admits), it is absolutely inconclusive. Of Elatea itself almost all trace seems to have disappeared: of the temple of Athena Cranaia foundations only were revealed, and, beside the inscriptions above-mentioned nothing but the usual horde of broken terra-cotta *ex votos* was found on the site. Monsieur Paris dilutes his meagre results with a catalogue of terra-cotta *ex votos* found in all parts of the Greek world—not an exhaustive list, by the way, for no mention is made of the terra-cottas found at Paphos in Cyprus. An interesting grotesque figurine, conjectured by the author to represent Demos, is represented in excellent plates; but, with that exception, the types are

those represented so fully at the neighbouring Tanagra, and call for no special remark. Elatea was once important in history, and then only for a moment: the temple of Athena Cranaia had apparently no considerable position even among local sanctuaries: and, when excavations conducted there have not resulted in illustrating to much purpose provincial life even in the obscurest of Phocian towns, one is tempted to question whether the exploration was worth a monograph—even whether it was ever worth undertaking at all! Monsieur Paris apologises a little in his Preface, and cites the unwillingness of the Greek Government and Greek archaeologists to give up important sites to foreign explorers as a justification of time and money having been spent in an obscure corner of Phocis. May we not ask, if these things are so, whether it is worth the while of foreign archaeologists to expend energy in gleaning over the fields of ancient Greece where so little now remains to be learned? It is natural that the Greeks should wish to reap their own land: results so obtained, however trivial, have always a justification from a national point of view on the same principle as the scanty fruit of excavations at Silchester or Chester. When weighed, however, against the probable outcome of excavations in Macedonia, Thrace, Asia Minor, Syria, Babylonia or Egypt, there can be no doubt as to the relative value. There is a full harvest to be reaped in all those lands, not thrice-gleaned fields to be gleaned again. The question is more vital for the English than for the French, whose archaeological Schools are state-aided; is it well for us to continue to solicit the public for funds to be expended on unimportant sites grudgingly conceded to us by jealous Greeks? It may well be questioned whether such exploration is the true function of our School; or whether it does not do work enough as a centre in Athens for students wishing to see Athenian treasures, or those in search of that education which a tour in Greece never fails to promote. The French have made their school a *point d'appui* for travellers in the East: why should not we also? We might do well to go even further than they; to recognize explicitly that not only Greater Greece but all Western Asia is our field, and to make of the British Archaeological School not only an appendage of museums and a promoter of 'students' excavations' in Greece, but a centre of British learned exploration for the whole Levant.

D. G. HOGARTH.

MONTHLY RECORD.

GERMANY.

At *Kreimbach in dem Pfalz* the foundations of a late Roman gate-tower have been discovered, at the south-west angle of the fortifications, two metres high, and dating about A.D. 300. They have been filled in with Roman grave-stones, etc., and towards the north-west and south-west are two broad circumference-walls. About twenty Roman coins were found, of the Emperors Magnentius, Constans, and Constantius, also nails, iron hooks, fragments of Roman pottery and tiles, the iron stem of a Roman standard, shaped like a spear, the cover of a sepulchre with a mask at one corner, and a fragment of sculpture with foliage; more remains were found further to the south-west.

In the same neighbourhood has been found an altar of red sandstone with figures of four deities: Apollo, Hercules, Juno with peacock, and Minerva; evidently the work of a local artist.¹

FRANCE.

Narbonne.—In the area of the ancient forum the pedestal of a statue has been brought to light, bearing the name of L. Aponius Chaereas, augur and quaestor of Narbonne, who is further described as aedile of that town, and aedile, *duumvir, flamen*, and *augustalitas* of Syracuse, Panormus, Termini, and other Sicilian towns. The lettering dates about 100–120 A.D., a time when Narbonne was the principal centre of maritime trade for Southern Gaul. Chaereas was therefore probably a merchant who had dealings with Sicily.²

ITALY.

Bologna.—Remains of a mosaic pavement have been found, belonging to the corridor of a house of considerable size, with geometrical patterns. On it were found remains of human skeletons. The pavement resembles another discovered here in 1890, cf. *Notiz. dei Lincei* 1890, p. 204.³

At *Crespellano* in the neighbourhood an interesting discovery has been made of an Etruscan *cippus* resembling those found at Certosa. It is ornamented with two garlands of ivy leaves and palmettes, above which is a large disc surrounded with triangles intended to represent the rays of the sun. On the base, in a panel, are remains of a galloping horse and Sphinx confronted. It is inscribed in Etruscan characters: **DEΙΟCLEΙKΕΙΣΑΜ** = *reithui* *Keisnas*, or *Kezia Caesiniae*. The gentile name *Retius* is found in an Etruscan inscription in *Fabretti*, *C. I. Ital.* 1725; *reithui* is an archaic form. The Rhaeti were of Etruscan origin, cf. *Pliny, Nat. Hist.* iii. 24.³

At *Mosciano* in Picenum a stone has been found with a votive inscription to Apollo in archaic Latin: **I. OPIO. C. L. || APOLINI || DONO. DID. || MURITO. L. Opio. C. l. Apolene dono ded. mereto.**³

Rome.—In the Campo Verano a sarcophagus has been found, of the front side of which a large part is wanting. On it are represented the genii of the four seasons in chlamydes; Winter with an uncertain emblem, Spring with a basket of flowers and a wreath, with a child by his side, Summer with ears of corn, and Autumn with vine-wreaths, grapes, and pomegranates. Within the sarcophagus is a bust of the deceased; above are represented two fighting cocks

¹ *Berl. Phil. Woch.* 9 and 16 April.

² *Academy*, 23 April.

³ *Notizie dei Lincei*, Dec. 1891.

and two children. Four other genii were represented, probably of fishing and the chase; but only their feet and a fish held by one remain. Another sarcophagus, of Luna marble, has a frieze of marine monsters on the cover, and within the bust of the deceased, a bearded young man wrapped in a mantle, with a gesture as if narrating. A third sarcophagus found in the Via in Cacaberis, of oval shape and well preserved, is decorated with two busts, male and female, of Greek type; it is of Greek marble. On the latter site were also found a torso of a statuette of Aesculapius, a fragment of a marble relief with part of a male figure (perhaps Mercury), and the bronze collar of a fugitive slave.⁴

SICILY.

Syracuse.—Excavations in different parts of the city have produced some important results, of which the most interesting are as follows:

(1) In Ortigia was found a beautiful female head in limestone, 0·30 m. high, wearing a *modius*, the back less finished than the front. The ears are pierced for metal ear-rings; although there are no remains of colouring, it is probable from the analogy of similar heads found here that it was originally coloured. It is probably a head of Persephone or Aphrodite; the expression of the face seems more appropriate to the latter, and she not unfrequently wears a *modius* (cf. Paus. ii. 10. 4). The hair was gilded, and is arranged in the style of the fourth century B.C. The head probably formed part of a bust, not a statue, and from its size seems more likely to have been set up in a temple than a private shrine. An altar of limestone, with cushioned top, and entablature of the Doric order, probably of the third century B.C.; on the top is a circular hollow to hold a brazier for incense. Three large paterae with black glaze, and numerous stamped amphora handles; fragments of cylindrical vases for architectural decoration (cf. Kekulé, *Terracotta*, pl. 61), ornamented with triglyphs, and metopes with *boukrana* and palmettes. A fragment of a crouching Seilenos in terra-cotta, the type apparently derived from Bes or Ptah, which formed the foot of some object. Fragments of a very fine tragic mask, life-size, with an expression of grief; a little fishing-boat with prow in the form of a boar's head and stern curved inwards (*ἀρθοκράρη*), probably an *ex voto* to Poseidon or other sea-god. A circular plinth of a column or *cippus* in terra-cotta, moulded, with stamped acanthus-leaves; part of a semicircular base with a rude Seilenos; the lower part of another, with the lower part of the head of a Seilenos; fragments of Apulian vases, one with a representation of Athena.

(2) From Neapolis: The vertical neck of a large geometrical vase with an imitation of triglyphs and rosettes in brown on pale drab ground; fragments of Protocorinthian ware.

(3) From Acradina: A block of white tufa with a panel in front in which is a representation in high relief of a warrior on horseback; above him is a conventional bird seen from the front, with wings spread, as on early b. f. vases; style of the end of the fifth century. This warrior may have been one of the Syracusan *ἱππικού* (Thuc. vi. 22); the relief is probably an *ἀρθητική*, not sepulchral. In this region was found a small sepulchre, with burnt and unburnt bodies—probably that of the poorer people in the second and first centuries B.C., when the city was falling into decay (Cic. *Tusc.* v. 64). All the space between Acradina and the sea is full of Roman and Christian sepulchres, which have been excavated during the last three years. One contained fragments

of a drum of a column with entablature, another with a wreath of laurel-leaves and berries above the dentils, and a third with egg-and-dart moulding and a band of flowers of five petals. Also a female head in relief with *modius*, in marble, with traces of painting, and a human foot in terra-cotta, painted, with sandal and a kind of stocking over the upper part.

(4) From the necropolis of Fusco: A sarcophagus containing vases and fragments, of which the chief are: a pyxis with black bands on red ground, as found at Megara Hyblaea; a kylix of archaic b. f. style, with a wreath of pointed leaves; a small b. f. hydria, on the shoulder a Siren between goats, on the body Theseus slaying the Minotaur, with a female and a male on either side—a local imitation of Attic ware; a large b. f. amphora, in one panel Pegeas between two draped figures, in the other a horseman; two b. f. kylikes, one with Apollo Citharoedus the other with a figure in the archaic running attitude and Hermes or a warrior; a large r. f. pelike in perfect preservation, 0·44 m. high, with an Amazonomachia and two youths conversing with an old man; a fine oxybaphon, 0·425 m. high, on one side a toilet-scene, the *γυναικοῦτις* indicated by an Ionic column, on the other a youth and girl conversing; Attic r. f. style of the best period.

(5) Between Acradina and Epipolae the only important find was a large krater with voluted handles, of early red-figured style; on one side of the neck Herakles and the lion, on the other Herakles and the bull; Herakles is beardless, and the type seems borrowed from the Antaio-vase of Euphronios.

(6) From Pleinmyrion: A sarcophagus containing vases: a small oinochoe with black glaze, on it a female head in the ground of the clay, early Attic r. f. style; a polychrome Attic lekythos, with a sepulchral scene, of the second half of the fifth century; and a *νευρόσπαστος*.⁵

GREECE.

Peiraeus.—Near the ancient theatre a Roman house has recently been excavated, consisting of three divisions, the *πρόθυρον* or *vestibulum*, *αίδην* or *atrium*, and a colonnade running round the *atrium*. In the *atrium* a remarkably fine mosaic pavement was brought to light, with *anthemia* in the corners, the centre occupied by a large head of Medusa, 0·60 m. in length. She has abundant hair, and two wings on the forehead, flanked by serpents. Round the centre runs an inscription from *Il.* v. 741-2, describing the Medusa on the shield of Athene. In the same place was found a terra-cotta antefix with a Medusa of a more repulsive type than the last.⁶

Argos.—Dr. Walstein has made known the results of the excavations of the American School on the site of the Heraion. The whole site of the second temple has been cleared, and cuttings made into the hill below, and the whole foundation will thus be plainly visible. Enough has been done in excavating on surrounding sites to bring about interesting discoveries of the foundations of the first temple, together with the charred remains of the superstructure of the first, burnt B.C. 429; on the lowest terrace are a *stoa* and other buildings. A rich harvest of ancient pottery, terra-cottas, and bronzes will have important bearings on the early history of art and ritual, and especially that of the Mycenaean period. Many beautiful pieces of the architectural decoration of the second temple came to light, sufficient for a restoration; also some interesting sculptures, including three well-preserved heads, one of the finest fifth-century style. The excavations will be continued next year.

H. B. WALTERS.

⁴ *Bull. Comm. Arch.* Jan.—March, 1892.

⁵ *Athenaeum*, 16 April.

SUMMARIES OF PERIODICALS.

Archäologisches Jahrbuch, vii. 1892. Heft 1. Berlin.

1. Puchstein: Die Säule in der assyrischen Architektur. Columns not employed by Assyrians in buildings, except in those of Hittite style, usually in *chilani*, or temples *in antis*, the pilasters supported by animals; evidence of this from cuneiform inscriptions dealing with buildings erected by kings from Sargon downwards.

2. Fröhner: Trojanische Vasenbilder (two plates). Two Corinthian vases with subjects from Trojan cycle, the first combining the events of Il. ix. 168 and xviii. 35, the second has the entry of the wooden horse into Troy.

3. Kretschmer: Zwei Perseus-Sagen auf attischen Vasen. (1) Perseus fighting with Bacchae (Nonnus xvii. 446 ff.), identified by connection with scene on reverse; (2) Perseus showing Gorgon's head to people of Polydektos in Seriphos (cf. Pind. *Pyth.* x. 44 ff.).

4. Assmann: Nautisch-archäologische Untersuchungen. Discusses Polledrara amphora and its Egyptian character, stèle of Dionysodorus with war-galley, marble block from Utica with merchant-ship, all in British Museum; also interesting points in representations of ships on vases and coins.

5. Hauser: Die sogenannten wagenbesteigende Frau, ihre Tracht und Bedeutung. Dress not feminine but masculine, not upper and under, but single tonic, chiton, with mantle falling symmetrically over it. This is the dress of charioteers and of Apollo on many archaic vases, etc. (e.g. Conze, *Mel. Thong.* pl. 4, *Mus. Greg. Etr.* ii. 14, 3a, Gerhard, *Auserl. Vasenb.* 20-21); Apollo, too, often appears as charioteer. Lekythos in Berlin (No. 2006) resembles this relief; fineness of rendering and tenderness of nude parts suitable to Apollo.

6. Körte: Herakles mit dem abgeschnittenen Löwenkopf als Helm. Herakles in east pediment of Aegina temple has lion's head as helmet, but rest of skin wanting; so on a r.f. hydria at Bonn (Kekulé 720); omission therefore not accidental in either case, quite in accordance with spirit of Aeginetan artists, to be as little definite as possible; Herakles would not be characterized more than necessary.

7. Mayer: Mykenische Beiträge. I. Stierfang. Vase-fragments found at Mycenae and Athens representing man as undoubtedly being tossed by bull, though in Tiryns painting and other instance may only be running on further side to catch it.

Anzeiger. Der Römische Grenzwall in Südwest-Deutschland; account of investigation of *limes*, with map. Meetings of Institute. Bibliography.

H. B. W.

Zeitschrift für wissenschaftliche Theologie. Herausgegeben von A. Hilgenfeld. 35. Jahrgang. Leipzig 1892.

II Heft. E. Bratke, *Die Lebenszeit Christi im Daniel—Commentar des Hippolytus.* 'The MS., lately discovered at Chalki by Georgiades, of the fourth book of the commentary on the prophet Daniel by Hippolytus of Rome, contains a passage, stating that Christ was born the 25th December on a Wednesday, in the 42nd year of the reign of Augustus, in the 5500th year *ἀπὸ Αδάμ*, and that he suffered in his 33rd year, the 25th March, on a Friday, in the 18th year of Tiberius. A comparison of the Chalki MS. with the Code in the Chigi Library at Rome as well as with the letter of Georgius, the Syrian,

shows that the numbers 5500 and 33, as referring to the birth and the death of Christ, form part of H.'s chronological system, but that all the other statements contained in this passage were added to his work at a later date.—J. Drieske, *Zu der eschatologischen Predigt Pseudo-Ephräm's.* 'The sermon, recently published by Caspari, attributed to Ephraem Syrus and to Isidorus of Sevilla, on the Anti-Christ and the end of the world, is not the work of either of these men. The author, a member of the Eastern, probably the Syrian Church, drew upon the writings of Apollinaris of Laodicea as well as upon the eschatological sermons of Ephraem.' In his notice of *Texts and Studies*, vol. i. no. 1, *The Apology of Aristides*, ed. by J. Rendel Harris, with an appendix by J. Armitage Robinson, Hilgenfeld maintains against Harris, that the *Apology* was addressed to the emperor Hadrian and not to Antoninus Pius. In the heading of the treatise 'omnipotens Caesar Titus Hadrianus Antoninus Augusti et elementes a Marciano Aristide philosopho Atheniensi' H. believes that the titles *Hadri.* and *T. Anton.* became confused. The later editor, who added the second name, introduced also the plurals (*Augusti clementes*), but left the sing. (*omnipotens*) and omitted the prepos. *ad* at the beginning of the sentence. The original author addressed only one emperor, as is evident from the invocation 'O King,' which occurs fourteen times. The Greek text given in the appendix by J. A. Robinson from 'the life of Barlaam and Josaphat' is of great value; but not, on the whole, preferable to the Syrian. In the Greek we have the basis of the original wording, in the Syrian a faithful reproduction of the whole plan of Aristides' *Apology*.—In his notice of vol. i. no. 2. *The Passion of St. Perpetua with an appendix on the Scillitan Martyrdom* by the editor, H. impugns Robinson's opinion that the Greek text is a translation of the Latin and maintains that the records of Perpetua (iii.—x.) and of Saturus (xi.—xiii.) point to a Punic original.—Notice of E. Wrede, *Untersuchungen zum ersten Clemensbriefe*. Göttingen 1891 (by Hilgenfeld). 'The able work of a young and gifted scholar, who belongs to Harnack's school of thought. The author is mistaken in saying that at the time of Clement the office of the *πρεσβύτεροι* included that of *ἐπίσκοποι* and *διάκονοι*. The analogy of the Old Testament, 40, 5. 41, 1 shows that there is the same fixed difference between Deacon and Presbyter, as between Levite and Priest; above all are the *ῆγούμενοι* or *προηγούμενοι*, the *ἐπίσκοποι*. *Τῷ γὰρ ἀρχιερεῖ θιαὶ λειτουργίαι δεδομέναι εἰσὶ*, says Clement. The *ἀρχιερεύς* in the Old Test. corresponds to the Bishop in the Christian Church.'—Notice of *Étude critique sur l'opusculum De aletoribus par les membres du Séminaire d'histoire ecclésiastique établi à l'université catholique de Louvain*. Louvain 1891 (by Hilgenfeld). 'The different authors have dealt with the various questions connected with *de al.* Their text is on the basis of W. Hartel's edition. The work, they state, is a homily of a Roman bishop, after St. Cyprian, delivered before a distinguished audience. Its character is not Novatian; for ep. x. the possibility of a conversion from the sin of gambling is referred to. The acquaintance which the author of *de al.* had with St. Cyprian's writings is shown in a more exhaustive manner than has been hitherto done.'

III Heft. A. Hilgenfeld, *Die Zeiten der Geburt des Lebens und des Liden Jesu nach Hippolytus*—refers to E. Bratke's essay (Heft II), but does not

accept all his conclusions. 'Hippol., H. says, assigned the birth of Christ to the 42nd year of Augustus' reign, to the 5500th year of the world, the 752nd u. c., the 2nd April, a Wednesday—and the death of Christ to the year 782 u. c., the 25th March, a Friday. He computed that the Lord had been born and that he died—30 years later—on the Passover day, his ministry not extending over one year. The gospel of St. John had not at the beginning of the third century sufficient weight as a historical document to overcome the tradition, compatible with the Synoptists, in regard to the duration of Christ's ministry.—Fr. Gorres vindicates against O. Seeck (*Das sogenannte Edict von Mailand*, *Brieger'sche Zeitschr. f. K. G.* xii. H. 4, p. 381 sq.) the historical character of Constantine's edict, given at Milan in 313.—A. Hilgenfeld—*Der Brief des Paulus an die Römer*—discusses the various theories brought forward recently by scholars, by Steck, D. Völter, B. Weiss, Lipsius, etc., in regard to the character of the Church at Rome with reference to the antagonism 'between Jew and Gentile' and he comes to the conclusion, that the readers of St. Paul's Epistle were Jewish converts who regarded the Gentiles as Patricians look upon Plebeians. [Notices of (1) P. Wendland, *Neuentdeckte Fragmente Philo's*, Berlin 1891, (2) E. Nöldechen, *Die Abfassungszeit der Schriften Tertullians* (Texte u. Untersuch. v. 2 Leipzig 1888), (3) Tertullian dargestellt. Gotha 1890. (4) B. Weiss, *Die Iohannes Apokalypse*. Leipzig 1891. (Texte u. Untersuch. vii. 1. have appeared in *Class. Review*. Notice of Texte u. U. vii. 2. Über das gnostische Buch *Pistis Sophia*, *Brod und Wasser*: *Die eucharistischen Elemente bei Justin*, dargest. v. A. Harnack (by Hilgenfeld.) 'Novel and valuable is the inquiry into the relationship of the P.S. to the New Test.; but the statement that the author of P.S. used our four Gospels only does not agree with p. 69 sq., which must refer to a fifth gospel, that according to St. Philip.'—The second essay acquaints us with the surprising discovery that bread and water were the elements of the Eucharist, not merely amongst heretics, but also with Justin Martyr. If this is the case, then an additional proof is given that the basis of Justin's teaching was Jewish Christian and that he was in touch with Ebionism, Epiphanius, Haer. xxx. 15.—Notice of Ψαλμοί Σολομώντος *Psalms of the Pharisees*, ed. by H. E. Ryle and M. R. James. Cambridge 1891 (by A. Hilgenfeld). 'The first readable edition was

given by the reviewer in *Messias Judaeorum* 1869. The present edition marks a real advance, the editors however have not acknowledged fully what they owe to the emendations of the text contained in the earlier work. They have compared fresh MSS., altogether 5 Codd. are now known. Their statement that the Psalms were composed in Palestine is open to doubt; the passage xvii. 6 έξωραν ημᾶς refers to men banished from their country. The text closely allied to the LXX. does not justify the assumption of a Hebrew original.

IV Heft. A. Hilgenfeld—*Der Brief des Paulus an die Römer*, 2. Artikel—continues his discussion of the theories propounded by D. Völter, B. Weiss, Lipsius, etc., concluding that St. Paul's doctrine of the Law, as well as the apology he offers (ep. 3, 31-3 sq., 9 sq.) of his own teaching is intelligible only if regarded as addressed to a powerful party of Jewish Christians at Rome.—J. Dräseke—*Zu Dionysios von Rhinokolura*—refers to the need of a methodical study of the Greek Dionys. MSS. and of the Syriac translations of this author, of the sixth century, as well as of an examination of Cod. Coislin. 371, and considers that this task would well repay the labour spent upon it.—W. Stark—*Die attestamentlichen Citate bei den Schriftstellern des Neuen Testaments I.*—gives the first instalment of his tables of LXX. quotations found in the New Test., his intention being to follow the quotations through the various stages of the history of the N. Test. text, to inquire whether they reflect the various readings of the principal LXX. Codd. and thus offer a contribution to the solution of the problems connected with the LXX. text criticism.—A. Thenn produces from *cod. gr. Monacensis* 208 v. *Locus Lucaneus I. 11-17 ab Origene graece explanatus*.—A. Hilgenfeld gives the text of the Cheltenham list of the canonical books of the Old and New Testament (x. cent.), as compared with, and supplemented or corrected by, that of the St. Gallen MS. (ix. cent.).—In his notice of E. Schürer, *Geschichte des jüdischen Volkes im Zeitalter Jesu Christi*, 2. Aufl., Hilgenfeld impugns the statement that P. Sulpicius Quirinius was governor of Syria 3-2 B.C. ('Notwithstanding this and several other minor inaccuracies of statement, H. considers that the work does credit to German scholarship and is indispensable to every student of the history of the origins of Christianity.'

C. MERK.

LIST OF NEW BOOKS.

ENGLISH BOOKS.

Ashford (C. M.) Latin dialogues for School representation. Post 8vo. Sonnenschein. 1s. 6d.

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